# ADVANCED ACCOUNTING PROBLEMS

BY E. L. KOHLER

SECOND EDITION

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### PREFACE TO SECOND EDITION

In this second edition of ADVANCED ACCOUNTING PROBLEMS most of the problems constituting the earlier edition have been redated and conformed to recent developments in accounting practice. Several problems have been omitted and twenty-seven new problems have been added; of the latter a few will be found to resemble those given in recent CPA examinations put out by the American Institute of Accountants. They appear here in their original form as prepared by the author. Income-tax problems which remain are limited to features likely to be retained in the Federal income-tax code for many years.

Although each problem in this book has been solved in its present form by a number of accountants, and each solution has agreed substantially with that appearing in the companion SOLUTIONS volume, the author claims no infallibility in exposition. He will welcome suggestions for both the content and form of future editions.

Acknowledgment should be made here of the helpful comments from users of the first edition. Many of these comments have been incorporated in the present volume.

E. L. KOHLER

#### PREFACE TO FIRST EDITION

Anyone who would presume to originate problems for students of accounting must realize that he faces grave difficulties. He must express himself in language that cannot be challenged as ambiguous; he must draw on a variety of experience if he is even partially to cover the field; and his problems, to be of the greatest value, must contain many points which are designed not merely to test but also to teach. If the problems are to be used by examining boards, there are further difficulties. for solutions must be carefully graded; the statement of the problem must be interpreted by persons having different backgrounds, must point to a particular and single solution, and must be of sufficient general application to test fairly the sometimes specialized professional training common to certain sections of the country. There is also the element of timing; the problem or selection of problems must occupy the examination period, but no more.

That these objectives underlie the problems in this book would be only fair to assert; that individual problems meet all the indicated tests would be a rash claim. What seems clear to the author will not impress his reader in the same degree, for each has had a different training and a different experience. Words are like theories in that their implications vary with individuals. It is unfortunate that no great progress has been made in building a common terminology for accountants. Language is as important as any other element in a problem. Therefore, a part of the author's program has had to be concerned with the constant testing of the diction which he has followed. Primarily it has been the language of public accounting, because the problems were aimed at prospective members of the profession and because public accountants are being more and more compelled to employ the same words.

The 134 problems constituting Volume 1 of this book were devised over a seven-year period commencing in 1930 and ending with 1936, at the instance of Mr. Durand W. Springer, then secretary of the American Society of Certified Public Accountants. They have been used in the professional examinations

Many examiners take the position that short problems give the candidate a better chance of expressing himself; that a long problem is easily muffed in the excitement which prevails in the examination room; and that failure to understand one problem does not necessarily mean a nonpassing grade when several problems are provided. Other examiners will say that short problems do not adequately test the "staying" powers of candidates; that in actual practice, situations encountered are complex and many-pointed; and that the candidate's ability to make a creditable showing in the face of a difficult situation is an important qualification for professional life. In the main, the author's sympathies lie with the latter group. Easy analyses are not what the practical accountant, even the beginner, faces. Business procedures cannot be interpreted and classified by the simple mind. The analysis which requires patient, sustained effort should be a part of the academic training of every practitioner-hopeful. If the author continued to have his choice as to examination content, he would probable select three 2-hour problems for the first problem session and one 4- or 5-hour problem for the second. He would assure himself, however, that the elements making up each problem were many and varied, and he would assign to arithmetic accuracy and completeness of solution a grade not in excess of 5 per cent.

The author hopes that this volume may find use in courses in advanced accounting problems, where subject matter the equivalent or more of purely professional training courses must be provided. The large number of accounting situations which have been crowded into this volume, together with the solutions therefor which the author has regarded as proper, should supply the instructor in graduate schools with a sufficient amount of material for a number of semesters of seminar debate. The two volumes, problems and solutions, would thus constitute a species of casebook.

A good many other controversies have raged at different times about problem material of the type which this volume contains, but only two of them need be mentioned here. The first has to do with stating problems in "even" dollars. Some examiners and teachers will dislike the odd cents which many of these problems contain; extra time is consumed, they say, in copying long dollar-and-cents amounts. To this the author

replies that in practice one does not deal only in thousands of dollars, that the prospective accountant must not be affrighted upon leaving his academic surrounding by figures that unfortunately do contain cents, and that a reasonable test of the ability of a candidate to copy, add, and subtract ordinary figures, extended though they may be, is not to be classed as being foreign to the aim of a professional examination. There can be extremes, of course. If a candidate is called upon to prepare a balance sheet and income statement from a trial balance and appended information in which hundreds of figures are involved, the work of copying might well be simplified by the rounding-out process. But problems of that type have been avoided by the author simply because he regards speed of copying an unimportant working tool of the professional accountant. Trial balances, when it has been necessary to give them, have been as mercifully short as possible, except in one or two cases where an object of the problem has been statement classification or specific analysis.

Another controversy has centered around the length of solutions. In Volume 2 conciseness is emphasized. An examination room is no place for extended, detailed working sheets nor for schedules of which the essential essence can be foreseen by both examiner and examinee; what is required is precisely what the problem calls for and no more. The author has been watchful in this matter. The student should learn to set forth his solution only within the framework which the problem indicates. If he is asked merely for a consolidated work sheet, it should thereupon be obvious to him that a classified consolidated balance sheet is not desired; he should not be ambitious to air the superficial knowledge which the translation to the more formal statement calls for, but rather he should strive to prepare a work sheet in the best possible style and finish. This point deserves much emphasis in coaching courses for the reason that, as examiners will testify, enormous amounts of time are consumed by candidates in preparing useless working papers and exhibits. In his statement of a problem the author asks for a form of solution that should follow without the preparation of intermediate working papers. In two or three instances, as an aid to the instructor, the solution includes intermediate papers, but the student should not be misled into thinking that they are essential to his procedure.

Problem solving requires a technique on the part of the student of accounting that is now and then deplored by practitioners who look to a more realistic preparation or test for professional life. A college training for accounting is short. especially where most of it is confined to the graduate school: if an undue share of this period is devoted to the acquisition of an analytic, pencil-pushing technique that finds no later application to the problems encountered in practice, might not this time be more profitably spent? To this it may be answered that the technique of problem solving is merely a step in the direction of professional life. Like other pedagogic devices, it exists for the purpose of covering a large field in a brief space of time. Until the practitioner has found a more practicable device than problems for testing the fitness of accounting neophytes, the schools will continue to follow the precedents which the profession has established for them.

Certain problems will be found unsuitable by some instructors, particularly those problems involving a knowledge of income taxation relating to past years. It may be that in such instances where the instructor calls for independent solutions as a part of the classwork, he will wish to give out in advance the proper computation of the tax liability or, perhaps, the rates of tax applicable to the years covered in the problem.

The author wishes to acknowledge his indebtedness to his brother, Frank E. Kohler, and to his former associates. Clarence O. Alverson (now deceased). Otto Baumgartner. Edward C. Friedel, Ambrose M. Reiter, and E. L. Sandberg, all certified public accountants in active practice, who prepared first drafts of many of the problems and whose injection into problem form of ideas gleaned from the practical world has added much to the book. To Dean Henry T. Chamberlain, and to Messrs. C. E. Whiting and L. A. Woodward are due the thanks of the author for a careful final review of portions of the manuscript. Numerous other professional accountants and members of state CPA examining boards have supplied the author with helpful criticisms of individual problems.

If, in the interests of solution compactness, the author has not made his position on any part of the contents of Volume 2 sufficiently clear, he will be glad to supply further details to any correspondent.

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### PROBLEM 1

# STATEMENTS OF INVESTMENT COMPANY

The Open Hearth Investment Company is engaged in the business of financial promotion, its income being derived from underwriting and service fees and from the sale and trading of securities. You have been engaged to prepare and certify to a balance sheet and profit-and-loss statement.

Following is a trial balance of the general ledger on December 31, 1943:

Account	$\underline{ ext{Debit}}$	$\underline{\text{Credit}}$
Cash in banks and on hand	\$ 374,506.77	
Accounts receivable	67,215.03	
Notes receivable	112,400.52	
Investments	4,090,206.17	
Prepaid expenses	1,645.40	
Cash surrender value of life insurance	:	
policies	12,583.91	
Furniture and equipment (less reserve for		
depreciation)	7,232.86	
Notes payable		\$1,333,909.64
Accrued interest		1,956.07
Accrued salaries and operating expenses		16,483.78
Capital stock-7 per cent preferred-		
\$100.00 par value		500,000.00
Capital stock—no-par common—14,684		1 00# 000 00
shares outstanding		1,265,000.00
Surplus		1,619,631.43
Profit on securities sold	100 015 05	38,408.81
Sales salaries and expenses	196,215.95	
Administrative expenses	104,621.69	50 050 00
Dividends received		70,050.00
Interest received	105 656 10	40,447.85
Financial expenses	105,678.18	100 410 00
Service charges		186,418.90
Totals	\$5,072,306.48	\$5,072,306.4S

A schedule of investments at December 31, 1943, is detailed below:

Security	Number of Shares	How Secured	Book Value
Common stocks:			
Breakers Foundry Co	500	Cash	\$ 46,875.00
Callex Manufacturing Co	200	Service and advances	10,210.85
Davidson & Sons, Inc	1,925	Service and cash	178,062.50
Independent Machinery Co.	23,295	Service and trade	1,048,275.00
Jackson Iron & Wire Works		Trade	361,500.00
Merrill Manufacturing Co	106.160	Trade and service	1,592,400.00
Waller Iron & Steel Co		Cash	90,806.09
Preferred stocks:	•		
Merrill Manufacturing Co	26,540	Trade and service	663,500.00
George & Fox Co., 615 per	•		
cent	<b>50</b>	Cash	2,500.00
Other securities-Bonds, etc.:			
Five \$1,000 Henderson Co.		Cash	4,016.73
15-year 6 per cent bonds,			
due 1956.			
Mortgage (secured by trust		Trade	92,060.00
deed on 640 acres of Iowa			-
farm property).			
Book balance			\$4,090,206.17
Dook balance			54,000,200.17

It has been agreed that investments are to be valued at cost, including reasonable allowances for service fees.

Breakers Foundry Company stock was purchased for cash November 25, 1943, at \$93.75 per share. An offer of \$90.00 per share was received for the stock on December 28, 1943, which, the president informs you, the company will accept.

For services rendered and expenses incurred during 1943, in negotiating a bond issue for Callex Manufacturing Company, the Open Hearth Investment Company was paid 300 shares of Callex stock. Service fees taken up as income were \$10,000.00: in addition, expenses were incurred totaling \$5,-210.\$5. One hundred shares were sold at \$50.00 per share. The current market price at December 31, 1943, which you consider reliable, was \$55.00 per share.

During the reorganization of Davidson and Sons, Inc., the Open Hearth Investment Company agreed to purchase 1,750 shares of common stock at \$92.50 per share. One hundred and seventy-five additional shares were turned over to them as compensation for services. Service fees of \$15,000.00 had been previously recorded on the books as earned; an appreciation of \$1.187.50 was added to bring the price of the shares

000 shares of preferred of the new organization. Fees and expenses of \$20,000.00 charged by the Open Hearth Investment Company were liquidated by payment of 6,160 shares of common and 6,540 shares of preferred. It was originally intended to market this stock at \$85.00 per unit consisting of one no-par preferred share valued at \$25.00 and four shares of no-par common valued at \$15.00 per share. Correspondingly, the values of these securities were appreciated on the books. Market conditions were responsible for postponing the sale, and the management has now negotiated a contract for the sale of the stock at \$45.00 per unit, the common shares being reduced in price to \$5.00 each.

You are shown a bona fide offer in writing of \$25.00 a share

for the stock of Waller Iron and Steel Company.

The George and Fox Company stock and the mortgage on Iowa property are valued at cost which fairly reflects market values.

Cash paid in 1943 for the Henderson Company bonds included \$16.73 of accrued interest which has been added to the value of these securities. The annual report of the Henderson Company shows a substantial balance added to surplus after paying dividends on preferred and common stocks. Market value is par.

Following is an analysis of surplus at December 31, 1943:

Particulars	Debit		Credit
Balance—January 1, 1913, per books		Ş	110,034.61
January 15—Dividends on preferred stock declared			•
December 1, 1942, and payable December 31, 1942	14,000.00		
January 15—Dividends on common stock declared	11,000.00		
December 1, 1942, at \$3.00 per share, payable			
December 31, 1942.  February 1—Cash surrender value of life insurance	45,000.00		
policies on officers' lives; increase adjusts bal-			
ance to December 31, 1942.			1,426.12
March 21—Approximation on stock of Block Cast-			·
ings, Incorporated			5,800.00
March 21, payable April 1, 1943, at \$2.00 per			
shurr	30,000.00		
June 201 - Appreciation of Boyle & Company stock	,		11,238.60
June 29 - Investment in G. C. Foundry Company -	27 222 22		
b inkrupt	25,200.00 1,348.20		

June 29—Appreciation of stock of Independent Machinery Co		501,520.00
July 6—Dividends on preferred stock declared June 29, 1943, payable July 1, 1943	17,500.00	,
July 12—Dividends on common stock declared June 29, 1943, payable July 1, 1943, at \$3.00	·	
per share	45,000.00	
Manufacturing Co		1,245,000.00
September 30, 1943, payable October 1, 1943,	00.000.00	
at \$2.00 per share	30,000.00	
Inc., stock	99 097 90	1,187.50
December 30—Bad accounts	22,087.80	
rupt	28,323.80	
of life insurance policies to December 31, 1943		1,884.40
December 31—Balance	1,619,631.43	
Totals	\$1,878,091.23	\$1,878,091.23

The following summary was prepared from Schedule L of the corporation income tax return for 1942:

Particulars	Am	nount
Profits per returnSubtract—Unallowable deductions:		\$227,624.71
Donations  Premiums on life insurance policies  Income taxes paid to United States	\$ 2,450.00 14,369.88 27,314.97	
Total unallowable deductions		44,134.85
Net profit shown by books before adjustments		\$183,489.86
Surplus and undivided profits as shown on balance sheet at close of preceding taxable year  Unrealized appreciation of investments		43,157.63 45,387.12
Total  Dividends paid during taxable year:		\$272,034.61
Preferred stock	27,000.00 135,000.00	
Total dividends paid		162,000.00
Surplus and undivided profits at close of taxable year		\$110,034.61

On December 31, 1943, the directors voted a 3½ per cent dividend on preferred stock and a dividend of \$3.00 per share on common, both payable January 1, 1944. The company

holds 316 shares of its own common stock which was donated several years ago by a shareholder. Dividends on this stock were taken up as income.

Various bank loans totaling \$1,250,000.00 are secured by 21,000 shares of Independent Machinery Company common stock, 90,000 shares of common and 20,000 shares of preferred of Merrill Manufacturing Company stock. The balance of the notes payable are endorsed by officers of the company.

The income-tax liability for 1943 is \$2,176.01.

An audit of the other accounts reveals them correct, with no necessity for adjustment.

#### PROBLEM 2

Division of Federal and State Taxes

An income tax is levied by the State of Zenith on corporate income derived from business done within the State. The rate of tax is ½ of the Federal income-tax rate, and, for 1945, corporations were assessed pro rata for only one-fourth year. The State income tax is deductible in computing income for Federal income-tax purposes, and the Federal income tax (which may be assumed to be 41 per cent), but not the State income tax, is deductible in computing income subject to the State income tax.

The Bain Company has a subsidiary located in the state whose net profit for 1945, before deduction for either State or Federal income tax, was \$50,546.81. Included therein is intercompany profit of \$5,297.15 which will be eliminated in the computation of Federal income tax inasmuch as a consolidated return will be filed. For the purpose of determining the local tax, however, the intercompany profit must be included in income.

Ascertain the amount of Federal and State income taxes.

#### PROBLEM 3

BALANCES OF PARTNERS' ACCOUNTS

A and B formed a partnership on January 1, 1943, for the purpose of selling paints, wallpaper, and supplies to painters and decorators, each having contributed \$25,000.00 cash. The partnership agreement stipulates:

(1) That A and B are to receive a salary of \$5,000.00 per year and that this salary is to be considered an expense.

(2) That each year's profits are to be divided in accordance

with the capital ratio at the beginning of the year.

On January 1, 1945, C paid \$30,000.00 for an interest in the partnership and it was agreed that A and B were to receive annual salaries of \$7,000.00 each; that C was to be paid an annual salary of \$4,000.00 and was to receive additional compensation equal to 3 per cent of the net sales to any new customers which he might secure; and that the profits were to be divided between the three partners in the same manner as in the old partnership.

On January 1, 1947, C, with the consent of A and B, began negotiations with D for the sale of his interest in the partner-ship.

You have been engaged by D to determine the correct balances in each of the partners' capital accounts at December 31, 1946.

During the course of your investigation, you find, in addition to the above facts, the following conditions:

- (1) The books have never been audited.
- (2) Salaries, including C's 3 per cent of certain net sales, have been credited periodically to partners' personal accounts. Withdrawals have been charged to the same account. The partners now agree that their capital accounts should have been adjusted at the beginning of each year by the balances of their personal accounts at that date.
- (3) The following entry was made January 1, 1945, upon the admission of C as a partner:

Goodwill	
C—Capital	\$30,000.00
To record admission of C as partner.	·

The \$30,000.00 cash paid by C was divided equally by A and B without any entry having been made on the books. The partners now state that it was their intention that C was to buy a 30 per cent interest in the net assets of \$70,000.00, and that the interests of A and B were to be 35 per cent each.

(4) The following errors were discovered in setting up liabilities on the books:

		Articles	Date Pu	lt	
	Invoice Date	Purchased	on Book	<u>us</u>	Amount
(a)	December 18, 1944-	-Merchandise-	January,	1945	\$ 3,000.00
• •	December 28, 1944-	–Auto Truck –	January,	1945	2,400.00
(a)	November 1, 1945-	-Merchandise-	January,	1946	10,000.00
(b)	January 2, 1946-	-Merchandise-	December,	1945	4,000.00
(a)	December 26, 1946-	–Merchandise—	January,	1947	2,000.00
	· ·				

<sup>(</sup>a) Included in December 31 inventory of year of invoice and in purchases of following year.
(b) Included in December purchases but not in December 31 inventory.

# (5) Net sales for 1945 and 1946 were as follows:

Year	From C's Customers	Other Sources	Total
1945 1946		\$200,000.00 260,000.00	\$250,000.00 350,000.00
Total	\$140,000.00	\$460,000.00	\$600,000.00

- (6) On January 15, 1947, the partners learned that one of their customers, whose account at December 31, 1946, totaled \$6,000.00, had departed for parts unknown and that the account was a total loss. This item has not been adjusted.
- (7) A number of credit memoranda were issued during the first week of January, 1947, covering returns made in December, 1946. An examination of the inventory sheets reveals that these returns, totaling \$6,000.00, were included at cost in the physical inventory of December 31, 1946, and that they were applicable to C's customers.
- (8) The partners' capital accounts were analyzed by you as follows:

<u>Particulars</u>	<u>1</u>	$\underline{\underline{B}}$	<u>C</u>	Total
Original contribution—January 1, 1943  Profits, per books—1943	\$25,000.00	\$25,000.00 6,000.00		\$50,000.00 12,000.00
Balance—December 31, 1943		\$31,000.00		\$62,000.00 18,000.00
Balance—December 31,           1944           Admission of C	\$10,000.00	\$40,000.00	\$30,000.00	\$\$0,000.00

Balance—January 1,				
1945 \$40	0,000.00	\$40,000.00	\$30,000.00	\$110,000.00
Profits, per books—1945 12	2,000.00	12,000.00	9,000.00	33,000.00
Balance—December 31,		•		
1945\$52	2,000.00	\$52,000.00	\$39,000.00	\$143,000.00
Profits, per books—1946 15	5,271.20	15,271.20	11,457.60	42,000.00
Balance—December 31,				
1946	7,271.20	\$67,271.20	\$50,457.60	\$185,000.00

(9) Partners' personal accounts have been summarized thus:

Particulars	$\underline{A}$	$\underline{B}$	<u>C</u>	Total
Salaries—1943	\$5,000.00 4,000.00	\$5,000.00 8,000.00		\$10,000.00 12,000.00
Balance—December 31, 1943	\$1,000.00 5,000.00	\$3,000.00*		\$ 2,000.00* 10,000.00
TotalWithdrawals—1944	\$6,000.00 10,000.00	\$2,000.00 . 5,000.00		\$ 8,000.00 15,000.00
Balance—December 31, 1944 Salaries—1945 (including C's	\$ 4,000.00*	\$3,000.00*		\$ 7,000.00*
extra compensation)	7,000.00	7,000.00	\$5,500.00	19,500.00
Total Withdrawals—1945	\$ 3,000.00 10,170.00	\$4,000.00 7,680.00	\$5,500.00 7,150.00	\$12,500.00 25,000.00
Balance—December 31, 1945	\$ 7,170.00* 7,000.00	\$3,6\$0.00* 7,000.00	\$1,650.00* 6,700.00	\$12,500.00* 20,700.00
Total Withdrawals—1946	\$ 170.00* 6,000.00	\$3,320.00 6,000.00	\$5,050.00 5,000.00	\$ 8,200.00
Balance—December 31,	<u>\$6,170.00*</u>	\$2,680.00*	\$ 50.00	\$ 8,800.00*

<sup>\*</sup> Red.

After reviewing the adjusted figures compiled by you, D agrees to pay C \$50,000.00 for his interest upon the following conditions:

- (1) That the total capital of the new firm be \$140,000.00 and that the respective interests of the partners in the net assets be: A, 30 per cent; B, 40 per cent; and D, 30 per cent.
- (2) That any difference between the partners' capital accounts, including D's, and their respective interest in the new

capital of \$140,000.00 be adjusted by a contribution to or withdrawal from the firm's cash.

The partners accepted these stipulations on February 1, 1947, and all cash settlements were made on that date. They now ask that you—

- (a) Prepare a statement showing in detail the effect of these adjustments on the partners' accounts.
- (b) Determine whether A and B have a Federal income-tax liability in connection with the receipt of \$15,000.00 each on January 1, 1945. The \$15,000.00 was not included by them in their tax returns.
- (c) Compute income or loss for Federal income-tax purposes for A, B, and C, as a result of the settlement now concluded.

### PROBLEM 4

# STATEMENTS OF REAL ESTATE SYNDICATE

The Conklin-Ward Real Estate Development Company organized the Good Will syndicate in 1942 to develop and sell a certain tract of land known as "Good Will Highlands." The agreement between the Conklin-Ward Company and the syndicate investors provides that the Conklin-Ward Company, for its services as manager, shall receive 50 per cent of the net profits of the syndicate after the capital investment of syndicate members has been retired. Operating expenses are to include 6 per cent interest on outstanding investors' capital.

Lots are sold on the installment plan, the usual terms being five years with quarterly interest on the unpaid balance at 6 per cent per annum. The books have been kept on the accrual basis, but Federal income-tax informational returns have been filed on the installment basis. The syndicate, being a joint venture, pays no Federal income tax. It has now been decided that the books should reflect the installment basis and you are employed to make the necessary changes in the records and to prepare financial statements for 1946 on the new basis.

Following is a trial balance prepared from the ledger of the syndicate at December 31, 1946:

	<u>Dr.</u>	Cr.
Cash in bank.	 \$ 198,997.77	
Contracts nativable	 2,187,059.24	

Interest receivable on contracts.	24,599.85	
Deposits with utilities on service extensions (to be		
returned)	18,616.21	
Bungalows, with lots	18,321.65	
Land and development at cost	308,036.10	
Reserve for cost of land sales		\$ 35,062.46
Mortgage on land		1,600.00
Accounts payable		36,649.75
Reserve for commissions		15,778.51
Reserve for development		36,298.42
Unpaid principal on certificates of beneficial inter-		
est outstanding (originally \$1,000,000.00; no		
changes during 1946)		200,000.00
Surplus—Balance December 31, 1945		<b>2,4</b> 06,366.93
Sales—Land		82,365.00
Sales—Bungalows		13,050.00
Cost of sales—Land	35,062.46	
Cost of sales—Bungalows	14,325.00	
Interest earned		141,948.42
Cash payments forfeited on canceled contracts		47,348.11
Advertising	17,942.86	
Commission on sales	65,660.37	
General office expenses	85,586.32	
Legal expense	15,045.19	
Recording and release fees	4,672.83	
Taxes paid (1945)	12,435.00	
Interest expense	1,239.50	
Miscellaneous expense	8,867.25	
-	00.010.105.00	20.010.407.00
	\$3,016,467.60	\$3,016,467.60

On January 1, 1946, the contracts receivable of \$2,789,-892.89 were composed of the following balances originating in the years shown. The percentage and amount of unrealized profit on the installment basis, which you find accurately computed, and which are in agreement with the tax returns, are also shown.

Year of Sale		Balance	Per Cent of Gross Profit		Unrealized Pross Profit
1942	• •	426,307.03 854,437.28 828,243.20 680,905.38	69.22 80.07 78.54 79.61	\$	295,089.73 684,147.93 650,502.21 542,068.77
	S	2,789,892.89		<u>\$2</u>	2,171,808.64

The percentages shown are average percentages for each year. Under normal conditions the sales value of lots increases as the subdivision ages.

On all cancellations the practice has been followed of charging the current year's land sales account with the original

During 1944, the Matson Construction Company built 15 bungalows for the syndicate at a cost of \$6,790.00 each, on lots having a cost of \$372.50 each.

Following is a summary of the transactions making up the present balance:

Debits	Credits
1944 Bungalows, 15 at \$6,790.00\$101,850 Lots, 15 at \$372.50 5,587 1944-5-6 Mortgages as-	gages on bun-
sumed by pur- chasers 55,000 1944 Discount on mort- gages (3 per cent) 2,250	0.00 1944 Bungalows, sold 1945 11 at \$7,162.50 78,787.50
1944 Interest paid 2,110 1945 Interest paid 2,312 1946 Interest paid 1,676	.50 1945 Rent received 1,300.00
1946 Interest paid 1,676 1945 Repairs and 1944 taxes 1,885	1946 Rent received 957.50
1946 Repairs and 1945 taxes	ance 18,321.65
\$174,366	.65 \$174,366.65

Interest on the above mortgages is payable on January 1 and July 1; interest due January 1, 1947, was paid December 30, 1946.

The reserve for cost of land sales represents the net cost of lots sold during the current year, whereas the reserve for development represents the balance of the estimated future cost to develop the area. The land cost, plus the estimated cost of development, was divided over the lots on the basis of the expected selling price of each lot in the area.

Commissions payable to salesmen upon completion of specified payments by purchasers are carried in the Reserve for Commissions. The unpaid commissions at December 31, 1946, represent commissions payable from future collections.

The mortgage on land of \$1,600.00 is payable at the rate of \$50.00 per lot as deeded. Interest thereon has been paid to date.

Interest on the unpaid investment principal of \$200,000.00 has been paid to December 31, 1945. No provision has yet been made for 1946 interest.

Real estate taxes for 1946 are estimated at \$15,000.00 on

vacant lots and \$175.00 each on the four bungalows. Taxes for 1945 included in the above bungalow account were \$875.00.

From the above information prepare:

- (a) Working trial balance with keyed explanations of adjustments.
  - (b) Balance Sheet.
  - (c) Statement of Profit and Loss.

#### PROBLEM 5

# CONSOLIDATED BALANCE SHEET

From the following information prepare a consolidated balance sheet:

# MAXWELL LUMBER COMPANY Balance Sheet—December 31, 1944 Assets

Cash	\$ 72,581.16
Receivables	620,486.74
Inventories	1,596,223.01
Investments	275,200.00
Bond discount	12,500.00
Land	145,068.00
Buildings	317,625.88
Trucks	58,392.15
Equipment	26,663.42
Furniture and fixtures	5,118.63
Goodwill	1.00
	\$3,129,859.99
T 1-1 11/41. 1 NT ( XX	00,120,000.00
Liabilities and Net Worth	
Accruals	\$ 36,236.41
Notes payable	75,000.00
Accounts payable	310,689.77
Depreciation reserve for buildings	95,322.60
Depreciation reserve for trucks	32,481.32
Depreciation reserve for equipment	6,040.78
Depreciation reserve for furniture and fixtures	1,114.55
6½ per cent first-mortgage bonds	225,000.00
Reserve for bad debts	17,256.01
7 per cent preferred stock, par \$100.00 per share	500,000.00
Common stock, no-par value, 14,260 shares outstanding.	1,000,000.00
Surplus	689,045.92
Net profits—1914	141,672.63
	\$3,129,859.99

(1) Receivables include \$10,000.00 of cash advances to Glazed Tile Roofing Company, \$17,500.00 of advances to offi-

cers of the company, and \$20,415.98 for materials sold to Herrick Construction Company. Accounts totaling \$216,476.00 are supported by notes, of which \$5.200.00 are past due and are of no value in the judgment of the management. The reserve for bad debts is deemed adequate.

(2) Inventories include \$6,5\$6.24 of roofing tile purchased in 1944 from Glazed Tile Roofing Company which had been invoiced at prices that realized 12½ per cent profit on sales.

- (3) Investments include \$10,000.00 in certificates of deposit, \$11,500.00 in county and municipal bonds, 1,150 shares of Glazed Tile Roofing Company stock, and 1,387 shares of Herrick Construction Company stock. The bonds were received in payment of accounts and are valued at par. The stock is also held at par, although the Herrick stock was purchased from an estate on January 1, 1944, at the average price of \$115.00 per share, the premium having been charged off as a 1944 expense. The Glazed Tile Roofing Company stock had been purchased at the date of organization at par.
- (4) Buildings include \$88,984.42 of billings from the Herrick Construction Company on an uncompleted contract for the erection of mills and yards in outside towns.
- (5) In accounts payable is the sum of \$3,049.16 due the Glazed Tile Roofing Company on open account, and \$5,200.60 due the Herrick Construction Company on the building contract. Additional billing of \$7,442.31 from the Herrick Construction Company, dated December 31, 1944, and received January 2, 1945, was not reflected on the books.
- (6) The first-mortgage serial bonds were issued on November 15, 1943, at 95. Interest is payable semiannually and has been met and accrued to date. Bond discount has not been amortized. The total issue was \$250,000.00. The indenture specifies that the bonds be retired at the rate of \$25,000.00 on November 15 of each year at a premium of 4½ per cent the first year and ½ per cent less for each succeeding year thereafter. You have been instructed to accrue the retirement premium on each maturity over the 12 months preceding its payment; the premium of \$1,125.00 paid on November 15, 1944, was charged to current profit and loss.
- (7) The minutes of the meeting of the board of directors held on December 30, 1944, record a resolution to pay the regular semiannual dividend on preferred stock January 1, 1945.

# HERRICK CONSTRUCTION COMPANY

# Balance Sheet-December 31, 1944

### Assets

Cash	\$	11.268.41
Receivables		208,411.26
Inventories—Materials ,		16.400.38
Investments		110,000 00
Machinery and tools		31,126.72
Trucks and automobiles		22,009.56
Furniture and fixtures		2,833 29
Goodwill (acquired in exchange for stock)		32,415.20
Work in process		496,211.17
Profits absorbed on uncompleted contracts.		97,064.28
	<u>81</u>	,027,740.27
Liabilities and Net Worth		
Notes payable	\$	60,475.25
Accounts payable .		52,180.61
Depreciation reserve for machinery		12,419.22
Depreciation reserve for furniture and fixtures		570.46
Depreciation reserve for trucks and automobiles		15,619 30
Billings on uncompleted contracts		547,218.96
Capital stock—no-par value (1,460 shares issued).		146,000.00
Surplus		118,837.57
Profit for 1944		64.418.90
Reserve for bad debts	•	10,000.00
	\$1	,027,740.27

- (1) Cash includes bank deposits and a petty cash fund of \$500.00, analysis of which shows on December 31, 1944, I. O. U.'s signed by officers and employees totaling \$395.00, all of several months' standing, and petty cash vouchers covering miscellaneous expenses of \$\$4.16.
- (2) Receivables include \$12,642.91 due from Maxwell Lumber Company on contract.
- (3) Investments include \$10,000.00 of stock in Glazed Tile Roofing Company and \$100,000.00 of the Maxwell Lumber Company first-mortgage bonds, on which interest income has been handled on a cash basis. Glazed Tile Roofing Company stock was purchased at par at the organization of the company in 1942. Bonds were purchased on December 31, 1943, at 96 and appreciated to par value by a credit to surplus on the same date. Original purchase was 110 bonds of \$1,000.00 face value, 10 bonds being retired by the Maxwell Lumber Company on November 15, 1944; 10 more bonds mature November 15, 1945. The premium of \$450.00 was credited to current income.

(4) Work in process includes the following items applicable to the Maxwell Lumber Company contract:

Material	\$41,388.47
Labor	31,467.28
Overhead	9,106.97
Total cost to date	\$81,962.72

Material used on this job includes \$17,823.12 of lumber purchased during 1944 from the Maxwell Lumber Company, at cost plus 12½ per cent. It also included \$3,659.40 of materials purchased during 1944 from the Glazed Tile Roofing Company, billed to net 10 per cent profit on sales.

- (5) Material inventory and work in process include respectively \$3,426.40 and \$93,100.24 of items purchased from Maxwell Lumber Company during 1944 on which the lumber company netted an average profit on sales of 12½ per cent, and which are in addition to the items mentioned in the preceding paragraph. Products bought from the tile company in 1944 and included in the two inventories total respectively \$575.22 and \$17,697.89, on which the Glazed Tile Roofing Company realized a profit of 10 per cent on sales.
- (6) Profits absorbed on uncompleted contracts represent the prorata share of the estimated profit to be realized, based on the amount of cost already incurred or the total work in process.
- (7) Notes payable include bank loans of \$35,000.00 secured by the Maxwell Lumber Company bonds.
- (8) Billings are computed so that they bear the same ratio to the total contract price as the costs to date bear to the total estimated cost. Billings are made periodically as the work progresses and as additional costs are added to work in process. The book balance of billings on uncompleted contracts includes billings to the Maxwell Lumber Company of \$96,426.73, which covers work in process up to December 31, 1944. Billings to other customers totaling \$46,056.49, and entered on the books January 13, 1945, completed the billings on all work in process up to December 31, 1944.
- (9) Accounts payable include \$20,415.98 due Maxwell Lumber Company and \$10,480.09 due Glazed Tile Roofing Company.

(10) Current profits include a premium of \$450.00 received upon the liquidation of the Maxwell bonds.

There were no unrealized intercompany profits at January 1, 1944, except as indicated.

Federal income taxes may be disregarded.

#### PROBLEM 6

# BALANCE SHEET AFTER REFINANCING

On December 31, 1939, the La Belle Shoe Company owned 1,420 shares of the XY Company which it purchased in 1937 at \$68.00 per share, and \$25 shares of the AB Company purchased in 1938 at \$86.00 per share. Book values of these two stocks on the dates of purchase were, respectively, \$65.25 and \$89.50 per share.

The frozen condition of the assets of the three companies has led to a plan of reorganization and refinancing. This plan, already approved by the directors and stockholders of the three organizations, involves the dissolution of two of the companies.

The La Belle Shoe Company has been chartered with an authorized capital stock of 80,000 shares of 7 per cent convertible preferred stock, par value \$25.00 per share, and 250,000 shares of no-par-value common stock. The conversion privilege can be exercised after May 15, 1940, and up to September 15, 1940, on a basis of two of common for one of preferred; thereafter, up to December 31, 1940, on a basis of five of common for three of preferred.

All stocks issued by the three companies and outstanding on January 1, 1940, with the exception of those held as investments by La Belle Shoe Company which were eliminated in the consolidation, were exchanged for shares in the new organization on the following basis:

- (a) For each share of La Belle Shoe Company preferred, four shares of the new convertible preferred will be given.
- (b) For each share of La Belle Shoe Company common, eight shares of the new company's common shares.
- (c) For each share of XY Company stock, six shares of the new common shares.
- (d) For each share of AB Company stock, four shares of the new common shares.

An investment banker has underwritten the balance of the stock less 1,200 shares of preferred and 4,000 shares of common which he is to receive as compensation on a basis of \$25.00 per preferred share and \$15.00 per common share.

The cash realized from the sale of stock is to be used to retire the first mortgage bonds and collateral trust notes and to liquidate \$500,000.00 in bank loans. Half of the balance is to be applied against the overdraft and trade notes and accounts payable, the other half to be utilized as working capital.

On December 31, 1939, the AB Company owed the La Belle Shoe Company \$42,591.19 on open account for goods manufactured for them in 1939. The AB Company had \$26,498.07 of this material in inventories on the same date, on which the La Belle Shoe Company had realized a profit of \$4,100.56 when sold.

In addition to the cash advances received from the La Belle Shoe Company, the XY Company owed the former organization \$110,923.45 on open account for raw materials purchased by the former and billed at cost plus 5 per cent handling charges. The handling charges are at approximate cost.

All accounts appearing on the foregoing balance sheets have been audited and reflect the financial condition of the three companies on December 31, 1939.

You are asked to prepare a balance sheet of the new company on January 1, 1940, after giving expression to the proposed financing.

Below is a balance sheet of the three companies on December 31, 1939:

# Liabilities and Net Worth

Bank overdraft. Bank loans. Notes and accounts payable to trade. Accruals. 6 per cent first mortgage bonds.	\$ 715,000.00 498,276.14 55,101.78 950,000.00	\$ 60,800.00 201,518.40 9,006.32	\$ 1,728.72 39,900.00 97,243.64 2,816.56
Collateral trust notes	, , , , , , , , , , , , , , , , , , , ,		65,000.00
Capital stock:			
615 per cent preferred—2,500 shares, \$100.00 par value	250,000.00		
Common:			
LaBelle Shoe Company—4,500 shares, \$100.00 par value X Y Company—2,000 shares, \$50.00	450,000.00		
par value		100,000.00	
			125,000.00
Surplus arising from stock donation	50,000.00		•
Earned surplus	101,174.18	74,3\$4.06	*37,143.31
	\$3,069,552.10	\$445,708.78	\$294.545.61
shares, \$100.00 par value  X Y Company—2,000 shares, \$50.00 par value  AB Company—1,250 shares, \$100.00 par value  Surplus arising from stock donation	50,000.00 101,174.18	74,384.06	*37,143.3

<sup>\*</sup>Red.

# PROBLEM 7

# FINANCIAL STATEMENTS INVOLVING COSTS

Following is a trial balance of the Maud N. Manufacturing Company, Chicago, a Delaware corporation, at December 31, 1945:

10.				
Account		Debit		Credit
Cash in First State Bank	S	7,209,15		
Customers' accounts		\$4,600.31		
Raw material (inventory at December 31,		-		
1944, plus 1945 purchases)		298,934.60		
Work in process		92,020.02		
Finished stock		66,098.50		
Unexpired insurance premiums		1,234.45		
Machinery and equipment		375,121.11		
Reserve for depreciation			Ş	100,240.96
Accounts payable and accrued liabilities				64,233.25
No-par-value common stock (20,000				
shares authorized and outstanding)				256,488.90
Earned surplus—Balance, December 31,				
1944				133,082.51
Sales				974,016.22
Cost of sales		779,115.31		
Materials absorbed				288,854.12
Direct labor absorbed				209,600.44
Factory overhead absorbed				192,832.40
Direct labor		209,600.44		
Factory overhead		186,550.05		
Salesmen's commissions		85,314.48		

Provision for Federal income tax  Totals		
Officer's salary Office rent and expense	3,376.20	

Physical inventories at cost, which were lower than market prices, were as follows:

·	December 31		
Particulars	1944	1945	
Raw materials	\$17,200.50	\$10,080.48	
Work in process:			
Material	41,236.48	39,604.02	
Direct labor	30,050.00	27,300.00	
Factory overhead	. 27,646.00	25,116.00	
Finished stock:			
Material	62,438.33	28,850.50	
Direct labor	49,650.00	19,400.00	
Factory overhead	45,678.00	17,848.00	

The inventory of December 31, 1944, was sold during 1945. Machinery manufactured in 1945 for own use:

Materials	\$ 3,454.63
Labor	
Overhead	3,496.63
Total capitalized	\$10,751.94

Engaged in the audit of the books of the company, you find the above figures correct with the following exceptions:

- (1) Factory overhead has been absorbed during 1945 on the basis of 92 per cent of direct labor which was the correct ratio for 1944; 1945 factory overhead absorbed must be corrected by employing the actual ratio for 1945. You are to use a percentage without a decimal fraction.
- (2) Depreciation expense in factory overhead includes an allowance on machinery manufactured for own use to which the excessive overhead has been added; depreciation was computed thereon at 5 per cent (one-half the annual rate), which is the proper rate for additions made during the year. The depreciation provision must be corrected.
- (3) The provision for Federal income tax should be reduced to \$10,008.16.

Prepare, in a form suitable for inclusion in an audit report:

(a) Balance sheet at December 31, 1945.

Statements for the year 1945, of-

- (b) Profit and loss;
- (c) Cost of manufacture and of sales.

Prepare also (d) a schedule showing the amount of material, labor, and factory overhead appearing in the adjusted cost of sales.

#### PROBLEM 8

# COAL-SYNDICATE STATEMENTS

From the following information you are required to prepare revised consolidated financial statements as at June 30, 1945.

A, B, C, and D form a syndicate and contribute equal amounts of cash necessary to purchase all the outstanding stock of the Mountain Coal Company, a mining enterprise. B, who has promoted the deal and will operate the company, has agreed to assume personally a \$50,000.00 mortgage obligation of the company together with all interest thereon after June 30, 1944, and to donate unconditionally new equipment and to make certain improvements on existing property without cost to the company, in return for which he will receive one-half the profits; the remaining one-half will be shared equally by the four syndicate members. There is no written agreement between the syndicate members or with B; and there are no records of meetings of directors and stockholders. It is expected that equal amounts of coal will be mined each year and that by July 1, 1954, all deposits will be exhausted.

Each syndicate member contributes \$40,000.00, and B purchases the outstanding 2,500 shares of stock of the company at a cost of \$160,000. B holds the shares in the name of the syndicate. On the books of the company at the time of purchase, the following accounts are found:

# MOUNTAIN COAL COMPANY Balance Sheet—July 1, 1944

Assets	<u>Liabilities and Net Worth</u>		
Land, owned in fee, at	Current liabilities \$ 14,560.13		
cost \$ 40,000.0	00 Reserve for amortization		
Leases, at cost 120,000.0	00 of leases 60,000.00		
Mining equipment, at	Reserve for depreciation		
cost			
Treasury stock (500	First mortgage 6% notes,		
shares, at cost) 41,000.0	00 due in annual install-		
Accounts receivable 32,651.	0. (0),000.00 00		
	ginning December 31,		
	1944 50,000.00		

Capital stock, 3,000 shares 300,000.00 Losses from operation....

\*168,983,70

\$302,147.20

\$302,147.20

\*Rel.

An appraisal of the land immediately before the purchase indicated that its fair value was \$50,000.00, consisting of workable coal deposits valued at \$30,000.00, and residual value of \$20,000.00. The fair value of the leases, which had run onehalf of their 40-year life, was found to equal approximately their present net book value. They will have no remaining value when the coal deposits have been depleted. An inventory of the equipment revealed that its fair value at July 1, 1944, was \$2,500.00. Accounts receivable were estimated to be 50 per cent collectible. Current liabilities as shown on the balance sheet were found to be understated \$8,266.24. The excess of the sum paid by the syndicate for the stock of the company over the sum of the values indicated in this paragraph, the value of the equipment donated and improvements made without cost to the company, represents the premium the syndicate members were willing to pay and did pay for the prospect of future profits from the coal deposits owned by the company at the time the stock was purchased.

During 1944, in accordance with the understanding, B, out of his personal funds, purchased new equipment and made improvements on existing equipment (all of which, old and new, having an average normal life of 20 years from July 1, 1944, with no residual value when the coal deposits have been exhausted may be assumed to have been put into use as of July 1, 1944); and he paid the mortgage note installment of \$5,000.00, and accrued interest of \$1,500.00, at December 31, 1944, and \$1,500.00 (an overpayment of \$150) at June 30, 1945.

At June 30, 1945, B presented to the syndicate members the following statements which he had prepared from the books:

#### Statement of Net Profit

Fiscal Year Ending June 30, 1945

P,	ìľ	t	ic,	ul	aı	3

 $\Lambda$ mount

Coal sales, less labor costs and cash paid out for ordinary operating expenses incurred since July 1, 1914, not including wages unpaid of \$550,00 and unpaid operating expenses of \$1,216.30 at June 30, 1945.

\$132,435.06

38,317.05

63,000.00 58,331.44

131.016.30

\$432,081.92

Less—		
Bad debts written off—		
Sales prior to July 1, 1944, not including \$4,060.4	1	
estimated as remaining uncollectible	. \$12,265.18	
Sales after July 1, 1944, not including \$145.22 esti		
mated as remaining uncollectible		
Leasehold depreciation		
Depreciation at 10% on old machinery	6,849.60	
Depreciation at 20% on new equipment and improve		
ments		
Interest on mortgage bonds		30,256.25
interest on moregage bonds	. 0,000.00	00,200.20
Net profit		\$102,178.81
	. \$63,861.76	
$A, C, \text{ and } D, \frac{3}{5}, \dots$	. 38,317.05	
, -,, , ,	. 00,01.100	
Balance Sheet-June 30, 194	15	
<u>Assets</u> <u>Liabili</u>	ties and Net	Worth
Land \$ 40,000.00 First mortga	ge notes	\$ 45,000.00
Leases		96,417.13
Zanata de la companya		00, 111.10

93,051.39

41,000,00

48,386,40

\$1,377.89

8,266.24 \$432.0\$1.92

Mining equipment.....

Treasury stock,.....

Accounts receivable....

Cash in bank......

Old liabilities paid.....

Revise the above statements in accordance with the agreement between syndicate members and in such a manner that the investment and profits (on a strict accrual basis) of all syndicate members may appear on the balance sheet in lieu of capital stock and surplus. B admits that he has made a number of errors in the statements; he and the other investors have agreed to accept your corrections.

Owing to A, C, and D

Equipment depreciation.

Net worth, July 1, 1944.

Lease amortization.

#### PROBLEM 9

# Adjustments for Depreciation

In auditing the books of a manufacturing company for the year ending December 31, 1946, you find the following situation in connection with the machinery account:

No fixed rate of depreciation has been used, the company arbitrarily writing off a certain amount each year and crediting the asset. The proper annual rate for this type of machinery may be assumed to be 8 per cent.

Machine C was considered to have a life of 10 years after it was completely overhauled on August 1, 1946.

Debits-

X:8H

An appraisal was made by the A Appraisal Company as of December 31, 1946, with the following result:

Machine	Cost of Reproduction	Reserve for Depreciation	Net Sound Value
A	\$12,000.00	\$ 7,680.00	\$ 4,320.00
C	18,000.00	7,860.84	10,139.16
$D \dots \dots$	7,000.00	4,480.00	2,520.00
E	8,000.00	1,151.33	6,848.67
$F, \ldots, \ldots$	11,500.00	1,150.00	10,350.00
G	15,000.00	500.00	14,500.00
Totals	\$71,500.00	\$22,822.17	\$48,677.83
<b>ゴ</b>	0		

The following entry appears on the records:

Machinery account	\$14,500.00
Surplus	8,322.17
Reserve for depreciation	·

To set up results of appraisal made December 31, 1946, by the A Appraisal Company.

Assuming that the Board of Directors has voted to adjust the books to the appraisal figures, do you believe that the entry is correct? If not, make the necessary adjusting entries, with complete explanation, to put the books on the proper basis.

Analysis of the machinery account follows:

24057

\$22,822.17

#### Machinery Account

1 - 1 - 1939	Machine A	\$10,000.00	
1-1-1910	Machine B	12,500.00	
1-1-1911	Machine <i>C</i>	16,000.00	
1-1-1912	Machine D	8,000.00	
5-1-1914	New motor for Machine A, replacing	-,	
	motor which cost \$1,200.00, in-		
	cluded in original cost of machine.	1,800.00	
11-1-1944	Rewinding of burned-out coils of	-1	
	motor on Machine B	350.00	
3 - 1 - 1915	Machine E.	7,850.00	
10 - 1 - 1915	Machine $F$	11,500.00	
8 - 1 - 1916	Machine $G$	15,000.00	
8 - 1 - 1946	Complete overhauling of Machine C	3,500.00	
S - 1 - 1916	Cost of changing positions of Ma-	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	chines C and D so as to place Ma-		
	chine $G$ in the most efficient posi-		
	tion	2,000.00	
12-31-1916	Appraisal	14 500 00	\$103

Credits—	
12—31—1939 Depreciation \$ 4,000.00	
12—31—1940 Depreciation 2,000.00	
12—31—1941 Depreciation 10,000.00	
12—31—1942 Depreciation 8,000.00	
12—31—1943 Depreciation	
12—31—1944 Depreciation 2,000.00	
12—31—1945 Depreciation 2,000.00	
8— 1—1946 Allowance on Machine B traded in on	
purchase of $G$	31,500.00
Balance in asset December 31, 1946, per appraisal	\$71,500.00

#### PROBLEM 10

#### Personal Income Tax Computation

John M. Good, a merchant, has called you in to recompute his income subject to Federal income tax for the calendar year 1946, the original return having been prepared by his bookkeeper. Aside from his business proprietorship, no books were kept. The following data was submitted by Mr. Good's secretary:

<u>Particulars</u>	$\underline{ ext{Amount}}$	
Income: Salary Income from business. Interest on deposits, bonds, etc Rents and royalties.	32,540.76 12,172.48 2,210.65	
Profit from sale of real estate, stocks, bonds, etc  Dividends on stock  Income from fire insurance  Total income	5,720.52 1,778.40	11
Deductions: Interest paid. Taxes paid. Bad debts. Contributions.	3,017.21 2,000.00	
Total deductions	8,265.9	)4
Net income	\$140,428.1	7

You determine the following facts:

The salary of \$3,600.00 was received from the D Corporation of which Mr. Good is an officer and director.

Income from a private business of Mr. Good's was computed as follows:

Receipts included \$150.00 from the sale of certain old fixtures which had originally cost \$1,355.00, and, including the writeoff for 1946, had been depreciated by \$1,005.00. The fixtures had not been removed from the asset account on the books of the business.

Other business expense included \$728.48, the cost of repairs and upkeep of Mr. Good's automobile which was used for business purposes about 75 per cent of the time.

Interest income included:

Particulars	4	Amount
On bank deposits. From industrial bonds. From utility bonds From Cook County Highway bonds.		769.48 5,388.00 4,365.00 1,650.00
	<u>Ş</u> ]	12,172.48

All utility bonds owned by Mr. Good were tax-free-covenant issues on which a 2 per cent tax had been paid at the source. Rents were analyzed as follows:

Particulars	Amount Received	Cost of Asset	Depre- ciation	Repairs	Other Expense	Net Profit
Building A	\$16,245.00	\$192,645.00		\$3,621.16		\$2,290.91

"Red.

The loss from Building B was attributed to the fact that Mr. Good occupied rent free one of the six apartments in this building.

Profit from sale of real estate, stock, bonds, and so forth, was made up of the following items:

Culvan

	Date Ac- quired	Amount Received	ciation Allow- able	Cost	quent Improve- ments	Net Profit
Factory building	. 1915	\$ 73,425.00	\$12,865.80	\$77,349.50	\$7,480.00	\$ 1,461.30
Stock rights (Master Corp.)		210.00				210.00
Barrington Mach		110,500.00		21,500.00		89,000.00
						\$90,671.30

The 20 stock rights (one right had been received for each 5 shares held) were sold at \$10.50 each and had been acquired as the result of the ownership of 100 shares of Master Corporation stock purchased in 1939 by Mr. Good at \$93.00 per share. The market price of the stock just before the rights were issued was \$138.00 per share, and the market value of the rights was \$7.50 each. The proper proportion of cost should be allocated to the rights.

Dividends were received from:

200 shares $M$ and $M$ Bank stock	\$3,000.00
50 shares Belding Foundry stock	175.00
\$256 shares Jordan Building Co. stock	538.52
60 shares Hemple & Co. stock	2,007.00
	\$5,720.52

Hemple & Company had discontinued business in 1945 and the dividend received in 1946 was the first liquidating dividend. The stock had been purchased at par (\$100.00) in 1937.

Income from fire insurance was received as compensation for damage done to a garage which was entirely destroyed by fire. The garage was built by Mr. Good at a cost of \$1,890.00 on which depreciation of \$629.50 had been taken. After the fire the structure was rebuilt at a cost of \$2,118.00.

Interest expense of \$2,648.73 covered personal borrowings and included \$378.15 of accrued interest. Taxes paid were as follows:

Personal-property	Ş	216.85
ment	2	2,800.36
	\$3	3,017.21

	$\underline{\text{Am}}$	ount
Particulars	<u> 1677</u>	1945
Cash sales.  Collected on open accounts.  Collected on consignment accounts receivable.  Bank loan—90 days, due September 1, 1945.  Bank loan—90 days, due March 1, 1946	64,393.43	\$116,9\$4.\$3 139,\$76.14 69,43\$.99 5,000.00 15,000.00
Total	\$209,219,50	\$346,299.96

(3) Cash disbursements were summarized by you as follows:

	$\underline{\mathbf{Am}}$	ount
Particulars	1911	<u> 1945</u>
Cash purchases	\$ 52,468,31	\$ 28,463.27
Payments to creditors	40.633.19	142,611,24
Payments to consignor	46.690.57	66,663.48
Salaries—Officers	12,000.00	16,000.00
Salaries—Other	28,260.52	44.282.18
1944 real estate taxes		1,583.00
Insurance (on building 1-1-14 to 1-1-19)	1,400.00	
Other insurance $(1-1-11)$ to $1-1-15)$	400.00	
Other insurance (1-1-45 to 1-1-46)		750.00
Furniture and fixtures	6.000.00	452.00
Remodeling store	12,000.00	
Donations	250.00	250.00
Federal income tax		1,279.09
Interest paid in advance		300.00
Bank loan paid		5,000.00
Dividend paid 9-1-45		20,000.00
Other expenses	16,707.\$5	29,581.94
Total	\$216.810.44	\$357.216.20

(4) A recapitulation of charge sales and purchases follows:

	$\underline{\text{Ame}}$	ount
<u>Particulars</u>	1944	1945
Sales—open account	\$79,431,26	\$162,387.26
Sales—consignment, first eleven months	58,363.21	74.893.16
Sales—consignment, December	8,436.19	10,416,93
Purchases	48.396.43	153.493.18

(5) Account sales are rendered and a check for the net proceeds is sent to consignor on the tenth day of each month covering the sales made in the previous month. The commission deducted by the consignee is 20 per cent of the sales. All receivables and collections pertaining thereto are handled by the consignee, who also absorbs any losses on bad accounts. No cash sales are made from the consignment merchandise.

the date of your audit, reveals that accounts listed therein deemed uncollectible are:

Particulars	Amount
1944—Regular sales. 1944—Consignment sales. 1945—Regular sales. 1945—Consignment sales.	\$3.6 <u>4</u> 3.2\$1.1\$
_	

(12) No formal declaration of the dividend paid appears in the minutes.

#### PROBLEM 12

#### SURPLUS ANALYSIS

From the detail appearing below, taken from the records of the Conway Conversion Company (a) determine the correct net profit for each of the five years shown, and prepare (b) a statement of earned surplus as revised for the five-year period ending December 31, 1944, and (c) an adjusting journal entry as at December 31, 1944, to bring the books into agreement with your figures.

#### CONWAY CONVERSION COMPANY

# Analysis of Surplus for Five Years

January 1, 1940-December 31, 1944

		<u>Debit</u>	Credit
Jan. 1, 1940	Balance		\$191,265,17
April 4, 1940	Dolan suit settled (damages allowed		
-	by court March 15, 1940, to injured		
	employee not covered by insurance		
	—suit started in 1939. On Decem-		
	ber 31, 1939, attorneys of company		
	submitted an opinion that no lia-	4-0.00	
	bility existed	\$ 5,450.00	
Aug. 2, 1940	Additional Federal income tax assess-		
	ment for calendar years 1935-1936.	1.148.60	
Dec. 31, 1940			137.649.70
Jan. 2, 1941	Dividends	150,000.00	
Feb. 1, 1941	J. M. Walters—Balance of commis-		
	sions: 1940 sales liability not deter-		
	mined at close of year	1,700.49	
June 30, 1941	Adjustment of necounts receivable		
	control (bringing control into agree-		
	ment with detail)		91.93
Aug. 18, 1941	Appreciation of plant values (see ap-		
	praisal of Messrs, King, Cole, and		
	Weed.		110.469.26

Dec. 28, 1941   Christmas bonus for employees.   17,500.00   235,681.14   Dec. 31, 1941   Drividend.   150,000.00   34,819.6	Nov. 11, 1941	Adjustment of accrued tax account (anticipated tax on real estate over-	•	9.954.00
Dec. 31, 1941	Dec. 28, 1941	estimated, December 31, 1940) Christmas bonus for employees		2,354.00
Windstorm in April, 1942	Dec. 31, 1941	Profit and loss from operations  Dividend	150,000.00	235,681.14
July 7, 1942   Extra dividend   100,000.00	April 30, 1942		4,819.60	ı
Dec. 31, 1942   Profit and loss from operations   150,000.00	July 7, 1942 Oct. 31, 1942	Extra dividend	100,000.00	
Jan. 10, 1943   Dividend   Dividend   Additional Federal income tax assessments and credits— 1937   1939   1,004.06     June 30, 1943   Extra dividend	Dec. 31, 1942			
1939	Jan. 10, 1943	Dividend		
1940		1937	742.11	
June 30, 1943       Extra dividend.       100,000.00         Nov. 30, 1943       Appreciation of value of various securities owned by company to market value.       72,580.00         Dec. 31, 1943       Profit and loss from operations.       112,043.17         Jan. 16, 1944       Dividend.       150,000.00         April 30, 1944       Cost of replacing faulty material manufactured and sold in—       6,510.97         1943.       12,518.20         April 30, 1944       Interest accrued not on books at December 31, 1943 (and still appearing as a liability at December 31, 1944.       1,725.34         June 30, 1944       Extra dividend.       50,000.00         Oct. 31, 1944       Loss on sale of securities (all holdings disposed of).       89,562.75         Nov. 15, 1944       Financing charge on two-year note dated November 15, 1944.       10,000.00         Nov. 30, 1944       Additional assessment, Federal income taxes—				
Nov. 30, 1943 Appreciation of value of various securities owned by company to market value	T. 00 1049			
Curities owned by company to market value				
Dec. 31, 1943	1101, 50, 1945	curities owned by company to		F0 =50 00
Jan. 16, 1944 Dividend	Dec 31 1043			
April 30, 1944 Cost of replacing faulty material manufactured and sold in—  1942			150 000 00	
April 30, 1944 Interest accrued not on books at December 31, 1943 (and still appearing as a liability at December 31, 1944)		Cost of replacing faulty material man-		
April 30, 1944 Interest accrued not on books at December 31, 1943 (and still appearing as a liability at December 31, 1944)			6,510.97	
Cember 31, 1943 (and still appearing as a liability at December 31, 1944)				
June 30, 1944       Extra dividend.       50,000.00         Oct. 31, 1944       Loss on sale of securities (all holdings disposed of).       89,562.75         Nov. 15, 1944       Financing charge on two-year note dated November 15, 1944.       10,000.00         Nov. 30, 1944       Additional assessment, Federal income taxes—	April 30, 1944	cember 31, 1943 (and still appear-		
Oct. 31, 1944       Loss on sale of securities (all holdings disposed of).       89,562.75         Nov. 15, 1944       Financing charge on two-year note dated November 15, 1944.       10,000.00         Nov. 30, 1944       Additional assessment, Federal income taxes—		1914)		
disposed of).   89,562.75				
Nov. 15, 1944 Financing charge on two-year note dated November 15, 1944	Oct. 51, 1944	1.088 on sale of securities (all holdings		
Nov. 30, 1944 Additional assessment, Federal income taxes—  1941 2,610.19  1942 514.27  Dec. 31, 1944 Depreciation of inventory to market prices. 54,243.06  Dec. 31, 1944 Bell & Company bankrupt—Account uncollectible 12,900.00  Dec. 31, 1944 Profit and loss from operations. 55,218.44  Balance 26,050.74	Nov. 15, 1944	Financing charge on two-year note	,	
Dec. 31, 1944   Depreciation of inventory to market prices   54,243.06	Nov. 30, 1944	Additional assessment, Federal income taxes—		
Dec. 31, 1944       Depreciation of inventory to market prices				
Dec. 31, 1944   Bell & Company bankrupt—Account uncollectible   12,900.00	Don 21 1014			
Dec. 31, 1944 Bell & Company bankrupt—Account uncollectible		prices		
Dec. 31, 1944 Profit and loss from operations. 26,050.74	Dec. 31, 1944	Bell & Company bankrupt—Account	•	
Balance	Dec. 31, 1944	Profit and loss from apparations	12,3800.00	ET 010 49
\$1,099,000,38 \$1,009,000,38	01, 10.11	Balance	26,050.74	55,218,44
			\$1,099,000.38	\$1,009,000,38

Investigation indicates that depreciation of plant and equip-

ment had been provided on a percentage of sales. The following schedule reflects the depreciation charged and the proper computation according to standard rates:

	Charged Off	Correct
<u>Year</u>	Per Books	Charges
Prior to 1940	\$198,313.20	\$183,617.38
1940	37,724.48	35,520.16
1941	68,419.26	40,113.09
1942	49,200.41	42,301.47
1943	28,653.97	43,662.51
1944	20,135.60	44,728.96
Totals	\$402,446.92	\$389,943.57

An examination of vouchers and physical inventories disclosed the fact that certain items had been taken up in inventories that had not been entered in the voucher register until the following period; also that a number of purchases had not been given expression to on the inventory, although the materials had been vouchered and were on hand at the close of the period. Below is an analysis of this condition:

<u>Date</u>	Material in Inventory but Not in Voucher Register	Materials Vouchered but Omitted from Inventory
December 31—		
1939	\$ 756.28	
1940	3,620.40	
1941	·	\$1,182.15
1942	9,417.38	2,046.50
1943	14,691.07	•
1944	-	3,912.63
Totals	\$28,485.13	\$7,141.28

Interest accrued and interest prepaid had not been expressed on the books at the close of the various years, the proper computation being found to be:

Date	$\frac{\text{Interest}}{\text{Accrued}}$	Interest Prepaid
December 31—		
1939		\$ 428.15
1940	\$ 591.10	1,617.30
1941	948.78	1,145.26
1942	1,993.93	633.27

- Sept. 1, 1945—Received rights, each carrying privilege of purchasing ½ share of stock at \$300.00 per share—Market values were: stock \$600.00 and rights \$100.00.
- Sept. 15, 1945—Exercised 64 rights and sold the balance for \$110.00 per right.

  March 1, 1946—All stock owned was surrendered and 10 shares no-par stock

  were received in exchange for each share surrendered. Four

  stock certificates were received corresponding to the pur
  chases noted above.
- July 1, 1946—Sold all the no-par stock represented by the purchases of September 1, 1944, and September 15, 1945, for \$62.00 per share.
- (a) Without regard to the correct income-tax procedure, you are required to compute the profit or loss on the sale of the stock and the rights (assigning to the latter an equitable portion of the cost of the stock) and also set up the cost per share and the total cost of each block of stock owned at December 31, 1946.
- (b) Assuming that one certificate was received on March 1, 1946, how would the profit on the sale of stock at July 1, 1946, differ, if at all, and what would be the cost of each remaining share at December 31, 1946?

#### PROBLEM 14

FINANCIAL STATEMENTS OF BUILDING CORPORATION

From the information given, you are required to furnish the following:

- (1) Adjusting journal entries to correct the books and to record the sale;
  - (2) Statement of profit and loss for the six-months' period.
  - (3) Balance sheet at close of period.

Maple Hotels, Inc., was incorporated under the laws of the State of Ohio on April 30, 1944, to take over the assets and liabilities of the partnership of Smith and Brown. The partnership had financed and built the Maple Hotel and completed it at the date of incorporation. The land and building were conveyed to the corporation at a valuation of \$471,551.50; the land at \$70,000.00, which was cost to the partnership, and the building at an appraised valuation of \$401,551.50, which was \$200,000.00 in excess of cost. All other assets and liabilities were conveyed and maintained at book values. In exchange for the net assets of the partnership as above mentioned, Smith and Brown received all the stock, except one qualifying share of the Maple Hotels, Inc.

Accrued real estate taxes, Maple Hotel		2,375.24 2,871.00 52.58
7% first mortgage bonds on Maple Hotel (\$1,000.00		100 000 00
due the fifth of each month during 1945)		180,000.00
No-par value common stock, 10,000 shares		296,396.02
Operating loss, year ending April 30, 1945	3,660.40	
Deferred bonus income on Maple Hotel lease	•	18,500.00
Organization expenses	500.00	•
Rents received, Maple Hotel lease		15,000.00
Income realized on Maple Hotel lease bonus		500.00
Salaries and wages	716.21	
Insurance expense	691.20	
Building repairs, Maple Hotel	905.53	
Real estate taxes (\$250.00 per month) expense	1,500.00	
Depreciation on building	2,015.51	
Interest on bonds and notes	6,235.40	
Miscellaneous office expenses	709.58	
	07.17.017.10	0545.045.40
	\$547,915.46	\$547,915.46

The accrued Federal income tax at October 31, 1945, is \$5.875.35.

#### PROBLEM 15

#### Comparison of Earnings Plans

The Coldwater Salt Company is contemplating a change in its capital structure with a view to reducing the charge to surplus for dividends on its 7 per cent preferred stock. The capitalization of the company at July 1, 1946, was as follows:

	Authorized	Issued
7% cumulative preferred stock, par value \$100.00 per		
share		\$300,000.00
6% preferred stock, par value \$50.00 per share		100,000.00
Common stock, no-par value	$25,000  \mathrm{sh}$	10,000 sh

Two alternatives have been suggested for eliminating the 7 per cent preferred stock:

- (1) Issuance of \$300,000.00 20-year 5 per cent first mort-gage bonds at 92.
- (2) Offering of rights to common stockholders to purchase one and one-half shares of common stock for each share now held at its stated value, namely \$20.00 per share.

The 6 per cent preferred stock and the common stock were issued at par and at the above stated value, respectively, at the time of incorporation in 1939. The 7 per cent preferred stock

was issued in 1941 at 95. Since that time the directors have authorized the writing off of amounts of the discount as follows:

Date	Amount
December 31, 1942	
June 30, 1914	2,500.00
December 31, 1945	1,500.00
Total	\$9,000.00

The common stock is on a \$2.00 annual dividend basis, and, should any new common stock be issued, it is expected the rate will remain unchanged.

The annual net profits of the company before deducting Federal income taxes have averaged \$133,500.00, and, considering the inelasticity of the business, it is estimated that in the future there will be no radical variations. You may assume a Federal income tax of 40 per cent.

On October 1, 1946, the directors of the company ask you to prepare a statement showing the effect of these projected changes upon the earnings applicable to common stock. If they are satisfied that a saving can be effected, they will call the necessary directors' and stockholders' meetings and secure the proper authorization from the Secretary of State so that the new capitalization may take effect as of January 1, 1947.

Prepare such a statement.

You are requested to reconstruct the profit-and-loss statement on the accrual basis from the data submitted below.

Following is a comparison of balance sheets which are correctly computed:

SILVER FUR FARMS, INC.
Balance Sheets, December 31, 1945, and March 31, 1946

Assets	December 31, 1945	March 31, 1946
Current assets— Cash in bank. Accounts receivable. Pelt inventory. Feed inventory. Stock subscription receivable.	\$ 990.04 40,135.14 49,500.00 6,400.00 300.00	\$ 9,988.77 20,522.22 18,375.00 4,500.00
	\$ 97,325.18	\$ 53,385.99
Inventory of foxes— Breeders—82 pairs at \$1,000.00 a pair (paid for in stock)	\$ 82,000.00 500.00 33,400.00	\$ 82,000.00 500.00 33,200.00
	\$115,900.00	\$115,700.00
Land, buildings and equipment  Less—Reserves for depreciation	\$140,479.46 11,667.29	\$140,479.46 13,563.26
	\$128,812.17	\$126,916.20
Deferred charges— Power line Organization expense	\$ 1,089.03 1,166.32	\$ 952.92 1,020.52
	\$ 2,255.35	\$ 1,973.44
Total assets	\$344,292.70	\$297,975.63
Liabilities and Net Worth  Current liabilities—  Bank loans	\$ 25,000.00 3,291.05 1,407.02 6,000.00	\$ 680.51 2,883.50 1,707.02 6,000.00
<b>5.4</b>	\$ 35,698.07	\$ 11,271.03
Deferred ranching income  Net worth— Capital stock—Issued and outstanding Surplus	\$ 33,000.00 \$196,000.00 79,594.63 \$275,594.63	\$ 22,400.00 \$196,000.00 68,304.60 \$264,304.60
Total liabilities and net worth	\$344,292.70	\$297,975.63

Accompanying the balance sheet at March 31, 1946, was the following statement of profit and loss for the three months ending March 31, 1946:

Particulars	Ame	ount
Income— Ranching fees—1945		\$ 1,530.00
Ranching fees—1946		3,885.21
Pelt sales— To furriers	\$10,730.00	
In New York Auction (net)		36,409.06
Total cash income		\$41,824.27
Less—Expenses—		
Feeding	\$ 4,219.09	
Pelting	1,572.21	
Farming	444.83	
Automobile	188.10	
Sundry	1,940.99	
Total cash expenses		8,365.22
Net profit		\$33,459.05

Following is a summary of the sources and application of all cash during the three-months' period ending March 31, 1946:

Particulars	Amount
Cash received from—	
Excess of income over expenses	\$33,459.05
Accounts receivable—Head tax	204.43
Accounts receivable—Scoring fees	47.40
Stock subscription receivable	300.00
Total	\$34,010.88
Cash applied to—	
Payment of bank loan	\$25,000,00
Increase of eash in bank	8,998.73
Payment of account payable on plant addition	12.15
Total	\$34,010.88

Additional information is given below on balance sheet accounts:

Accounts Receivable		
<u>Particulars</u>	12-31-45	3-31-16
Ranching fees for 1945 unpaid Ranching fees for 1946. Fox pelts sold to furriers.	25,150.00 11.430.00	18.861.79
1945 head tax assessed on ranchers	452.15	247.72

Fees paid to American Fox Institute for scoring		
(rating) ranchers	331.75	284.35
Interest charged on delinquent account	15,88	
Total	\$40,135,14	\$20,522.22

During the first three months of 1946, the following charges to accounts receivable were reversed:

Particulars	Amount
Ranching fees for 1945 on two pairs of ranchers.  Ranching fees for 1946 on six pairs of ranchers.  Interest receivable.	2,400.00
Total	

The two pairs of ranchers on which 1945 fees were owing were forfeited to the ranch, and one pair of the six was assigned to the ranch in lieu of fees to March 31, 1946, on which date the remaining five pairs were withdrawn. The pelt value of each fox is estimated at \$150.00.

Pelt inventory represents the estimated fur value, less cost of selling of pelts at New York Auction at December 31, 1945, and March 31, 1946.

Pup inventory was reduced through deaths, partly offset by ranchers forfeited to company for nonpayment of fees.

Accounts Payable		
Particulars	12-31-45	3-31-46
Plans and specifications on buildings	\$ 225.00 12.15	\$ 225.00
Feeding Pelting Farming	554.00 1,451.93 79.99	225.00
Automobile Sundry	45.54 922.44	100.60 129.91
Total	\$3,291.05	\$ 680.51
Accrued Local and State Tax	es	
Particulars	12-31-45	3-31-46
Head tax on ranchers, charged to accounts receiv-		
able	\$ 732.02 675.00	\$ 732.02 975.00
Total	\$1,407.02	\$1,707.02

The Federal income tax accrued has been properly computed

	Under the BushelJan. 1, 1943 and AfterthoughtNov. 1, 1942	2,000 5,000 36,200	1,200 2,500 7,700	$   \begin{array}{r}     700 \\     500 \\     \hline     14,100   \end{array} $
Summ	nary of plate costs charged to	sheet sto	ock—	
	Book		_	Cotal te Cost
	Break the Market	•		,250.00
	and Cure of Indolence Te in a City Flat		. 1	,260.00 255.00
	Reduce and What			,100.00 ,950.00
	Live with Relatives		1	900.00
The Li	ght Under the Bushel			,300.00
Though	it and Afterthought		· · · <u> </u>	750.00
			\$10	,765.00
Inver	tory of sheet stock—August 3	31, 19 <del>11</del> –	_	
Copies	Book		To	tal Cost
4,000		• • • • • • • • • • • • • • • • • • • •		00.020,
4,000 1,100	Causes and Cure of Indolence  My Life in a City Flat			,880.00 363.00
1,600	How to Reduce and What			880.00
2,000	Thought and Afterthought			680.00
100	The Light Under the Bushel	• • • • • • • • • •		87.00
			<u>\$ 5,</u>	,970.00
Inver	tory of bound stock—August	31, 1944		
Copies	Book		Tot	tal Cost
1.000.	How to Break the Market		. \$	590.00
200	Causes and Cure of Indolence		•	110.00
150 200	My Life in a City Flat  How to Reduce and What	• • • • • • • • • • • • • • • • • • • •	• •	55.50 130.00
<b>5</b> 0	How to Live with Relatives			54.00
			\$	939.50

#### PROBLEM 18

#### ANALYSIS OF TRIAL BALANCE

Following is a trial balance at December 31, 1946, of the Mitchell-Bryan Construction Company, which was incorporated in 1946. The trial balance, prepared by the bookkeeper, does not balance by \$100.00, and you have been asked whether the cause of the difference can be located by an inspection of the trial balance. The only items known to be correct are the cash balances shown to be in the bank and in the working fund.

Analyze the trial balance, showing the sources of the postings in each account, and point out the various possible causes of the error.

Account	Debit	Credit
Cash in bank	\$ 627,980.18	\$ 438,889.51
Working fund	25,286.44	23,698.35
Accounts receivable	468,801.05	252,730.18
Marketable security	50,000.00	·
Supplies	38,965.02	23,745.33
Work in process	413,577.88	293,471.SO
Trucks, tools, and implements	31,637.25	
Reserve for depreciation on trucks, etc		13,468.72
Bank loan	10,000.00	75,000.00
Accounts payable	353,503.10	463,165.32
Deferred billing on work in process	48,962.28	132,476.40
Capital stock		300,000.00
Interest received		250.00
Sales		385,286.93
Cost of sales	293,471.80	
Administrative expense	39,897.57	
Totale	\$2,402,082.57	99 409 199 57
Totals	\$2,402,082.01	<u>\$2,402,182.57</u>

#### PROBLEM 19

#### FINANCIAL STATEMENTS OF SYNDICATE

From the data submitted below, prepare, for Murray and Ryan, a balance sheet at December 31, 1945, and a statement of profit and loss for the year ending on that date.

Alfred Murray and Frank Ryan purchased a piece of unimproved property in 1943, each contributing \$200,000.00 cash as his share in the cost of \$400,000.00. They decided to erect immediately an apartment hotel, which would be transferred upon completion to a proposed cooperative venture to be known as Clearview Apartment Hotel Corporation.

Murray and Ryan entered into a trust agreement whereby Murray, as trustee for the two promoters, took title to the land at a value of \$400,000.00 and arranged with his banker for a loan of \$3,000,000.00, secured by the land and the proposed building, the latter to cost not less than \$2,500,000.00. The indebtedness was to be evidenced by 20-year 6% gold bonds dated July 1, 1944, with interest payable semiannually. Murray engaged French and English, architects, to design and supervise the construction of the hotel.

On July 1, 1944, the Clearview Apartment Hotel Corpora-

tion was organized with a capitalization of 15,000 shares of common stock having a par value of \$100.00 each, Murray, as trustee, subscribing for the entire 15,000 shares.

The building was finished December 31, 1944, and on that date the net equity (land and building, less the mortgage bonds) was transferred to the Clearview Apartment Hotel Corporation as payment for the 15,000 shares of stock, an entry being made on the trustee's books on that date as follows:

Hotel stock to be sold	00.00
Capital stock	\$1,500,000.00
To record receipt of 15,000 shares of	• •
Clearview Apartment Hotel stock.	

The architects agreed to accept, in lieu of a fee, 15 per cent of the total net earnings of the trustee. In computing profits accruing to the architects from the sale of stock, the land acquired by the trustee for \$400,000.00 is to be valued at \$500,-000.00. Any sums credited to the account of the architects are to be considered distributions of profits and not elements of expense or cost of construction.

The trustee's books were not closed at December 31, 1944, and a trial balance at that date and at December 31, 1945 was as follows:

	December 31	
<u>Particulars</u>	<u> 1944</u>	1945
Debit balances:		
Cash in bank		\$ 3,669.34
Construction costs	<b>\$</b> 2,563,\$19.33	2,563,819.33
Land	400,000.00	400,000.00
Mortgage fund	31,954.30	
Expenses paid in connection with sale of		
Clearview Apartment Hotel stock		146,318.92
Bond discount	300,000.00	300,000.00
Interest paid	90,000.00	180,000.00
Financial expenses in connection with		
bond issue	22,643.18	22,643.18
Hotel stock to be sold	1,500,000.00	462,000.00
French and English	15,000.00	45,000.00
Net equity in real estate		176,818.00
Notes receivable		207,612.50
Stocks and bonds		100,287.44
General expense		10,382.19
Discount on sale of hotel stock		92,800.00
Totals	<u>\$4,923,416.81</u>	\$4,711,350.90

Credit balances:		
Capital stock	\$1,500,000.00	\$1,500,000.00
Mortgage payable	3,000,000.00	3,000,000.00
Interest carned		31,350.90
Alfred Murray	000,000,00	90,000.00
Frank Ryan		90,000.00
Totals	\$4,923,416.81	\$4,711,350.90

During the course of your audit, the following additional information is obtained by you:

(1) The trustee agreed to pay the interest from January

1, 1945, to June 30, 1945.

(2) All sales of stock were credited at par to the "Hotel stock to be sold" account. An analysis of stock sales for 1945 is as follows:

Particulars	Amount
Par value of stock sold	\$1,038,000.00 92,800.00
Net sales	\$ 945,200.00
Paid for in cash and other assets as follows:	
Cash at time of sales	\$ 289,400.00
Stocks and bonds, at market price when received	73,392.13
Net equity in miscellaneous real estate	164,318.00
Notes receivable	418,089.87
Total	\$ 945,200.00

- (3) Cash received on notes in 1945 amounted to \$183,582.-06.
- (4) On December 18, 1945, notes receivable totaling \$26,-895.31 were paid in stocks and bonds having a market value of \$25,500.00. These securities are included in the trial balance dated December 31, 1945.
- (5) The net equity in miscellaneous real estate is composed of the following:

Particulars	Property A	Property $B$	Total
Book value of land	\$220,318.00 100,000.00	\$74,000.00 30,000.00	\$294,318.00 130,000.00
Net value set up on books at time above properties were acquired. Payments on mortgages during 1945	\$120,318,00	\$14,000.00 2,500.00	\$164,318.00 12,500.00
Net equity per books December 31, 1945	\$130,318.00	\$46,500.00	\$176,818.00

(6) An appraisal of the above properties reveals that, at the date of acquisition, they had the following fair market values, before deducting the mortgages unpaid:

Property $A$	
Total	\$230,000.00

Depreciation on these properties in 1945 may be disregarded.

- (7) In order to induce certain noteholders to pay promptly, the trustee, on December 15, 1945, agreed to allow a discount of \$4,000.00 and these notes were paid in January, 1946, on that basis.
- (8) All disbursements in 1944 were made from the mortgage fund and the balance at December 31, 1944, was paid to the trustee early in 1945.
- (9) The market value of stocks and bonds at December 31, 1945, was \$122,418.32 and the accrued interest on notes receivable and on bonds amounted to \$2,481.26.
- (10) Unrecorded liabilities at December 31, 1945, were as follows:

Stock sales expense	\$5,683.21
General expenses	816.32
Total	\$6,499.53

- (11) No profit, realized or deferred, is to be shown as arising at the time of the exchange of the hotel property for capital stock.
  - (12) No income-tax liability will arise to the trustee.

#### PROBLEM 20

#### INVENTORY OVERHEADS

From the information following, recompute the overhead that should be included in the various inventory and cost of sales accounts of the Palace Specialties Company for the year 1945.

The accounts you are called upon to adjust are:

Department					
Particulars	<u>A</u>	$\underline{B}$	<u>c</u>	$\underline{D}$	Total
Inventory of work in process 1/1/45:					
Material				\$ 33,500.00	
Labor Overhead	6,000.00 5,100.00	4,500.00 3,500.00	5,500.00 2,800.00	18,000.00 7,725.00	34,000.00 19,125.00
O termeatin	<del></del>			\$ 59,225.00	
	-				
Inventory of fin- ished stock 1/1/45:					
				\$162,000.00	
Labor Overhead	11,500.00 10,200.00	9,500.00 7,625.00	9,500.00 5,900.00	84,500.00 36,975.00	115,000.00 60,700.00
Overnead					
	\$ 44,200.00	\$ 38,125.00	\$ 35,400.00	\$283,475.00	\$ 401,200.00
Cost of sales 1945:					
				\$405,000.00	
Labor Overhead	63,500.00 70,050.00	77,300.00 45,207.50		206,650.00	405,500.00
Overnead				91,747.50	240,300.00
	\$303,550.00	\$233,257.50	\$201,595.00	\$703,397.50	\$1,441,800.00
Inventory of work in proc- ess 12 31/45:					
	\$ 15,500.00	\$ 11,500.00	\$ 9,500.00	\$ 38,500.00	\$ 75,000.00
Labor	8,000.00	,	6,000.00	21,000.00	40,000.00
Overhead	7,050.00	4,125.00	3,100.00	8,925.00	23,200.00
	\$ 30,550 00	\$ 20,625.00	\$ 18,600.00	\$ 68,425.00	\$ 138,200.00
Inventory of fin- ished goods 12/31/45:					
Material	\$ 25,500.00	\$ 22,500.00	\$ 26,000,00	\$175,000.00	\$ 250,000.00
inhor	13,500.00	12,000 00	15,500.00	91,000.00	135,000.00
Overhead	12,000.00	8,625.00	S,300.00	40,350.00	69,275.00
	\$ 52,000.00	\$ 43,125.00	\$ 49,800.00	\$309,350.00	\$ 451,275.00
Departmental transfers at					

transfers at cost (included incost of cales above);

Material Labor Overhead	\$ 12,250.00 \$ 5,800.00 2,707.50	4,750.00 \$ 2,550.00 1,095.00	17,000.00* S,350.00* 3,802.50*	
	\$ 20,757.50 \$	8,395.00	29,152.50*	

<sup>\*</sup>Red.

Included in the foregoing inventory of finished goods at December 31, 1945, are items which were on hand at the beginning of the year in finished-goods account, as follows:

	Department					
Particulars	$\underline{A}$	<u>C</u>	$\underline{D}$	Total		
Materials	2,000.00	\$2,200.00 1,800.00 800.00	\$ 6,500.00 6,000.00 1,875.00	\$12,200.00 9,800.00 4,325.00		
Totals	\$7,150.00	\$4,800.00	\$14,375.00	\$26,325.00		

These figures, totaling \$26,325.00, are the ones that appeared in the opening inventory; in the closing inventory they were included at one-half these values, or \$13,162.50, owing to style changes during 1945, and the other half was carried to cost of sales. The remainder of the opening inventory of finished stock and work in process was sold during 1945.

Overhead during 1944 and 1945 has been based on a percentage of prime cost. While this method is open to certain objections, it results in substantial accuracy, and it has been decided to adjust the actual figures for absorbed overhead by the difference between the total absorbed and the actual overhead. On this basis, the total overhead at December 31, 1944, in finished goods should have been \$56,147.50 and in work in process, \$17,690.63. Total actual overhead for 1945 was \$278,-245.00.

# PROBLEM 21 Fund Balance Sheet of Hospital

The Hopewell Sanitarium, a nonprofit corporation, is maintained by subscriptions from members of a certain religious organization. Its trustees have submitted to you the opening and closing trial balance for the calendar year 1945 and ask you to prepare the necessary adjusting journal entries and a balance sheet showing the various assets and liabilities in detail under each fund, including thereon a summary of changes

during the year in the net worth of each fund. No changes or adjustments are necessary on the opening trial balance, but in preparing the balance sheet as of December 31, 1945, the following instructions and information are to be considered:

(1) Two bank accounts are maintained, one for current

funds and the other for all the remaining funds.

(2) Depreciation on the balance in the building accounts at the beginning of the year is to be computed at the rate of 2 per cent. Depreciation on equipment, which should be similarly handled, is to be provided at the rate of 10 per cent. No provision need be made for additions during the year or for the uncompleted building. To perpetuate the building and equipment funds in accordance with an agreement with the donors, depreciation expense is charged against current fund surplus, and reinvestment will be made of the accumulated funds in other buildings and equipment.

(3) To help complete building B, an issue of \$50,000.00 6% first mortgage bonds on buildings A and B was sold in December, 1945, at par, to friends of the hospital, and the proceeds were credited to unappropriated funds. The issue is dated December 31, 1945, and matures serially from December 31, 1950, to December 31, 1955. "Unappropriated funds" is used as a clearing account for major cash transactions await-

ing the approval of the Board of Trustees.

(4) Investments belonging to the annuity fund (Account E 18) having a cost (and book value) of \$35,000.00 were sold for \$30,190.00, which amount included \$900.00 for accrued interest. The cash was used to help finance building B, the credit being made to unappropriated funds. The loss from the sale is to be charged to the building fund. At the time of the sale of the investments, the following journal entry was made:

Loss on side of investments \$ 4,8	10.00
Cash in bank—B 11	90.00
Unappropriated funds—F 60	\$30,190.00
Cash in bank—unappropriated funds—F 11	4,810.00

(5) During the year, cash payments to current fund totaling \$3,000.00 were credited to unappropriated cash (Account F 11) to help defray 1945 operating expenses of the sanitarium. In addition, current fund borrowed \$3,000.00 from the

building fund as evidenced by a non-interest-bearing demand note given for that amount.

- (6) The annuity contract fund consists of interest-bearing annuity bonds sold to friends of the hospital, the proceeds of which are invested as determined by the Board of Trustees. Upon the death of an annuitant, the contract terminates and the investment becomes available for current funds. Likewise, the net income from the annuity fund is transferred to current funds at the close of each year.
- (7) Changes in net-worth accounts may be explained as follows:

Current-fund surplus was credited with funds unappropriated at December 31, 1944, amounting to \$1,000.00, and net income from an annuity fund, \$3,245.20; and charged with net operating losses for 1945.

Nurses' home fund was credited with donations of \$227.00, and equipment fund with donations of \$2,035.85.

A new annuity contract was written for \$5,000.00.

Donations received during the year amounting to \$3,000.00 were credited to unappropriated funds.

(8) All income and expense accounts for the year have been balanced out and all transactions, including those for which adjustments are to be made as indicated above, were formally approved by the Board of Trustees on December 31, 1945.

#### HOPEWELL SANITARIUM

			Trial E December		Trial E		
٠	Acc	count	<u>Dr.</u>	Cr.	Dr.	_	Cr.
A	11 Cash in bar	nk		\$ 86.47		\$	347.58
A	12 Petty cash		200.00		\$ 250.00		
A	14 Patients'						
	ceivable.		3,974.59		4,237.40		
$\mathbf{A}$	16 Notes recei	vable	350.00		350.00		
A	17 Reserve for	bad debts		200.00			550.00
$\mathbf{A}$	20 Inventory	of supplies	2,693.66		2,778.21		
A	30 Prepaid ins	eurance	904.20		732.50		
$\mathbf{A}$	51 Accounts p	ayable		1,127.81			1,392.28
A	52 Notes paya	ble		500.00			500.00
Α	521 Notes pay	able, Hope-					
	well Sani	tarium					3.000.00
$\mathbf{A}$	53 Bank loan.			12,500.00			5,500.00
$\mathbf{A}$	60 Current fur	nd surplus	6,291.83		5,941.75		-
В	11 Cash in bar	nk	1,799.33		•		4,250.00

В	15	Notes receivable, Hope-			3,000.00	
7.	• •	well Sanitarium	76,750.00		6,750.00	
В		Investments	60,000.00		60,000.00	
B		Land	176,842.25		176,842.25	
B		Hospital building A Hospital building B	110,042.20		110,012.20	
15	<i>-1</i>	(uncompleted)	S,500.00		151,739.33	
В	50	Accounts payable	0,000.00	10,000.00	101,100.00	
В		Reserve for deprecia-		10,000.00		
1,	JJ	tion		28,496.20		28,496.20
В	60	Hospital building fund.		285,395.38		285,395.38
ć		Cash in bank	325.00		52.00	200,000,00
Č		Petty cash	25.00		25.00	
č		Investments	7,500.00		8,000.00	
č		Land	24,815.00		24,815.00	
č		Nurses' home building	92,425.75		92,425.75	
č		Reserve for deprecia-	,		,	
_	•,•,	tion		18,333.18		18,333.18
$\mathbf{C}$	60	Nurses' home fund		106,757.57		106,984.57
$\bar{\mathbf{D}}$		Cash in bank		42.50		42.50
D		Rooms and general				
		equipment	28,796.53		28,996.53	
D	192	Dietary equipment	10,298.97		10,435.40	
		Operating room equip-	·		ŕ	
		ment	17,961.91		19,561.33	
Ð	194	Laboratory equipment.	6,812.28		6,912.28	
D	195	Nurses' home equip-				
		ment	9,552.61		9,552.61	
D	59	Reserve for deprecia-				
-		tion		15,840.14		15,840.14
D		Equipment fund		57,539.66		59,575.51
E	11	Cash in bank	3,263.17		8,638.17	
E		Accounts receivable	375.00			
E	18	Investments	160,250.00		160,250.00	
E	60	Annuity fund		163,888.17		168,888.17
F	11	Cash in bank, unappro-				1 010 00
F	en	priated	1,000.00	1 000 00		4,810.00
F	OO	Unappropriated funds Loss on sale of invest-		1,000.00		83,190.00
T.		ments			4.010.00	
		mema,.,			4,810.00	-
		Totals	701.707.05	\$701,707.08	787,095.51	\$787,095.51

#### PROBLEM 22

### INTERCOMPANY ADJUSTMENTS

On January 1, 1941, the Milander Products Company purchased the entire capital stock of the Morgan Company for a eash consideration of \$22,000.00. From the following balance sheets, taken from the books of the Morgan Company at December 31, 1940, 1944, and 1945, together with the supple-

mentary information given, prepare the necessary adjusting journal entries on the books of both companies at December 31, 1945:

•	December 31		
Assets	1940	1944	1945
Cash	\$ 834.65		
Rents receivable	2,568.42	\$ 2,056.20	\$ 1,860.51
Unexpired insurance	385.18	463.80	463.80
Equipment	10,899.53	22,481.93	22,481.93
Goodwill	46,000.00	46,000.00	46,000.00
Deficit	7,935.58	7,935.58	7.935.58
Total assets	\$68,623.36	\$78.937.51	\$78,741.82
Liabilities and Net Worth			
Accounts payable	\$13,303.54	\$ 2,035.17	
Reserve for depreciation	3,169.82	8,439.13	\$10,687.32
Milander Products Company	2.150.00	18,463.21	18,054.50
Capital stock	50,000.00	50.000.00	50.000.00
Total liabilities and net worth.	\$68,623.36	\$78,937.51	\$78,741.82

The books of the Morgan Company have not previously been audited and the following information was obtained during the course of the present examination:

Accounts payable at December 31, 1940, were understated by \$1,483.21, and this amount was charged to expense in 1941 when paid.

All cash receipts and disbursements since January 1, 1941, have been handled by the Milander Products Company and entered in the current account with the Morgan Company. The nominal accounts on the Morgan Company books are closed to Milander Products Company's current account at the end of each year.

The following profit-and-loss statement of the Morgan Company for the year ending December 31, 1945, was presented to you:

Particulars	Am	ount
Rents received		\$26,242.67
Rents paid	\$12,000.00	
Depreciation	2,248.19	
Insurance		
Other expenses	8,318.91	23,705.29
Net profit transferred to current account		\$ 2,537.38

Balance—December 31, 1945	18,054.50	
Totals	\$44,492.86	\$ 44,492.86

During 1945 additional equipment at a cost of \$6,000.00 was purchased for the Morgan Company and charged to the parent company's investment account, increasing the balance therein at December 31, 1945, to \$28,000.00.

The proper rates of depreciation for 1945 are 10 per cent on the equipment balance at the beginning of the year and 5 per cent on additions. Unexpired insurance at January 1, 1945, amounting to \$463.80, covers the first five months of 1945. The rents receivable at December 31, 1945, are understated by \$500.00 on the Morgan Company's books, but the correct amount was set up on the books of the parent company. During 1945 neither company made the entry necessary to take up the \$2,000.00 annual charge for executive services made by the Milander Products Company. Rents due Morgan Company are to be carried on their own books rather than on the books of the Milander Products Company.

# PROBLEM 23 BALANCE SHEET AFTER MERGER

Mason Mfg. Co. and Pelham Sons, Inc., decided on April 30, 1946, to combine their interests in a single company to be established under the laws of the State of Delaware for that purpose and to be called Mason-Pelham Company. You are called upon to prepare a balance sheet of the new company.

Balance sheets of the two companies on the date of the consolidation were as follows:

Assets	Mason Mfg. Co.	Pelham Sons, Inc.
Cash. Receivables, net. Inventories. Land.	\$ 147,965.75 189,660.67 386,200.27 140,000.00	\$ 95,456.45 57,720.53 652,429.51
Machinery and equipment, net	\$95,609.\$2 500,000.00	352,726.74
Total assets	\$2,259,436.51	<u>\$1,158,333.23</u>
Liabilities and Net Worth		
Accounts payable	\$ 45,475.3S 38,916.20	\$ 131,216.21 7,843.12

(d) The fixed assets of Pelham Sons, Inc., were informally appraised by officials of both companies as follows:

Particulars	Per Books	Appraisal
Machinery and equipment		
Net value		<del></del>

It was agreed that these figures should appear on the records and statements of the new company.

(e) The new company will have but one class of stock: no-par common, which will be issued against the net values of the tangible assets, as above described, on the basis that each share of new stock is worth \$5.00, remaining amounts less than \$5.00 to be disregarded. In addition, the two companies will receive shares (equal together to the total already issued) in the ratio of 2 shares for the Mason Mfg. Co. to 1 share for Pelham Sons, Inc., as the purchase price of their earning-producing abilities. Your opinion has been solicited on the latter point. Should "capitalized earning power" be set up on the new balance sheet to offset the shares issued against the earning power of the two enterprises? You are informed that the laws of the State of Delaware require no minimum paid-in value.

#### PROBLEM 24

#### APPLICATION OF FUNDS

From the following information prepare a worksheet for a statement of application of funds for B Company which reflects, among other items, the increase or decrease in working capital:

	March 31	
Assets	1945	1946
Cash on hand		\$ 1,000.00
Bank deposits	7,489.60	
Accounts receivable	68,531.08	93,856.29
Plant and equipment	198,215.83	224,582.60
Prepaid expenses	1,650.26	1,765.41
Inventories	106,418.31	111,307.26
Notes receivable	22,052.14	18,998.33
Goodwill	35,600.00	•
Deferred bond discount	2,460.52	2,003.15
Investments,	10,000.00	12,500.00
Total assets	\$452,917.74	\$466,013.04

20 per cent on installment sales prices is allowed on all cash and ordinary credit sales.

Following is a trial balance of Woods and Bray at December 31, 1945:

#### WOODS AND BRAY (A Partnership)

### Trial Balance-December 31, 1945

Particulars	$\underline{\mathrm{Dr.}}$	$\underline{\text{Cr.}}$
Cash in bank	\$ 5,188.50 223,066.00 4,954.00	
Installment Ordinary		\$ 3,000.00 400.00
Inventory of furniture, valued at the lower of		
cost or market—January 1, 1945	101,767.00	
Reserve withheld by Furniture Finance Trust. Unexpired insurance (December 31, 1945)	11,733.25	
Store fixtures	665.00 4,900.00	
Reserve for depreciation—Store fixtures	4,500.00	1,864.00
Delivery truck	996.00	1,001.00
Reserve for depreciation—Truck	• • • • • • • • • • • • • • • • • • • •	124.50
Electric sign	2,525.00	
Reserve for depreciation—Sign		2,072.60
Bank loan		9,000.00
Accounts payable		11,891.03
Due to Furniture Finance Trust		76,755.00
Harry B. Woods, Capital		155,491.75
William R. Bray, Capital	2,580.00	51,260.87
William R. Bray, Drawing	1,230.00	
Totals	\$359,604.75	\$311,859.75
Net profit		47,745.00
	\$359,604.75	\$359,604.75
	<u>Dr.</u>	<u>Cr.</u>
Sales—		\$ 16,156.00
Cash salesOrdinary credit sales		48,244.00
Installment sales		182,950.00
Purchases—		102,000.00
New	\$135,807.00	
Depreciated cost of furniture repossessed	3,500.00	
Repairs on repossessed furniture	712.00	
Partner's salary	5,200.00	
Interest paid	682.00	
Furniture Finance Trust—interest charges	12,567.00	
Bad debts— Installment accounts	2,555.00	
Other accounts	385.00	
Other accounts	000.00	

8

1943	38,947.00	50	19,473.50
1944	87,464.00	54	47,230.56
	\$152,679.00		\$80,111.90

Bad-debt losses were charged directly to expense. The reserves for bad debts appearing on the books are considered adequate.

At December 31, 1945, an analysis of the receivables and the loan from the finance company revealed the following:

		$\mathbf{Due}$	$\mathbf{Due}$	
<u>Particulars</u>	Past Due	in 1946	After 1946	Total
Installment accounts receivable Ordinary receivables Loan from finance company	506.00	\$73,500.00 4,448.00 31,250.00	•	\$223,066.00 4,954.00 76,755.00

The opening inventory was overstated \$3,600.00 through an error in footing the summary. This error resulted in overstating the 1944 gross profit percentage on installment sales by 2 per cent. The gross profit reported in 1944 on collections on 1944 installment sales totaled \$16,200.00.

The closing inventory, valued at cost, was \$101,192.00, and at the lower of cost or market, \$99,362.50.

The schedule prepared on loans from the finance company shows prepaid interest of \$4,623.00.

Provide depreciation for 1945 using the rates prevailing in past years, as follows:

`~	Per Cent
Store fixtures	10
Delivery equipment	25
Electric sign	20

Installment accounts receivable were financed in part during 1945 by loans from the Furniture Finance Trust on assigned accounts. The interest charge is 20 per cent on four-year accounts, with a decreasing charge on shorter term receivables. In addition, the finance company retains a 15 per cent deposit refundable as the loan is liquidated. Payments on loans are based on the installments maturing each month on receivables assigned.

The 6 per cent bank loan of \$9,000.00 matures January 2, 1946, interest thereon having been prepaid.

Since the formation of the partnership in 1935, profits have been divided as follows:

Harry B. Woods	2/3
William R. Bray	1/3

On January 1, 1945, William R. Bray discontinued active participation in the management and operation of the partnership. To compensate Harry B. Woods for his services, the following clauses were added to the partnership agreement:

"(1) Each partner shall be allowed interest at the rate of 5 per cent on the balance in his capital account at the beginning of each year, excluding unrealized profit.

"(2) Harry B. Woods shall be allowed a salary of \$5,200.00

per annum, payable \$100.00 per week.

"(3) Harry B. Woods shall be entitled to a bonus of 5 per cent of net profits computed on the accrual basis, after interest on capital accounts, but before bonus."

From the above prepare:

- (1) Journal entries necessary to adjust the books and to place them on the installment basis.
- (2) Balance sheet at December 31, 1945, on the installment basis, supported by a schedule of changes in the partners' capital accounts.
- (3) Statement of profit and loss for the year 1945 to show the net profit, both on the accrual basis and on the installment basis.

#### PROBLEM 26

### Branch and Home Office Cost of Sales

From the following information, taken from branch and home office books, prepare for the year ending December 31, 1946:

- (1) Statement of gross profit which should indicate the gross profit earned by the branches and home office and the combined gross profit after deducting commissions.
  - (2) Statement of cost of sales.

The home office makes shipments to branches and dealers and bills both at a figure which is 120 per cent of factory cost less 10 per cent for commissions. The entry on home office books on shipments to dealers is as follows:

Debit—Accounts receivable at net billing price.

Debit—Commission expense at 10 per cent of gross billing price (120 per cent of factory cost).

Credit—Sales at gross billing price.

At the same time inventory is credited and cost of sales charged at cost.

When shipments to branches are made, the following entry is made:

Debit—Branch at net billing price.

Credit—Inventory at factory.

Credit—Reserve for profit in branch inventories.

Periodically, the branch advised the home office of the number of units sold by them and this information is used to make the following entry:

Debit—Cost of sales at factory cost.

Debit—Reserve for branch profit in inventories.

Debit—Commission expense at 10 per cent of gross billing price to branch.

Credit—Sales at gross billing price.

The net billing price to branches and dealers was found to be \$108.00 per unit.

The inventory in units of the home office at December 31, 1946, was as follows:

On hand—January 1, 1946	9993
Shipments to branches	7693
On hand—December 31, 1946	 2300

When the branches received shipments from the home office they charged inventory at net billing price of \$108.00 per unit and credited home office. As sales are made, the branch makes the following entries:

Debit—Accounts receivable at selling price.

Credit—Sales.

and

Debit—Cost of sales at \$108.00 per unit. Credit—Inventory at \$108.00 per unit. The units in branch inventory at December 31, 1946, were determined as follows:

On hand—January 1, 1946	
Received from home office in 1946	
Total	
On hand—December 31, 1946	502

The cost of production in 1945 and 1946 was uniform; the reserve for profit in branch inventories had a credit balance of \$6,088.00 on December 31, 1946.

#### PROBLEM 27

Effect of Bonus and Tax on Income

During 1946, the net sales of the Durable Machine Company were \$3,200,000.00 and net profit, after deducting bonuses and Federal income tax of 40 per cent, was \$140,700.00. In lieu of salaries, A. B. Ferguson, president of the company, and T. A. Gouffe, sales manager, each received a bonus: the former, 10 per cent of net profit after deducting all bonuses and Federal income tax; the latter, ½ per cent of net sales plus an amount equal to ½ the compensation of the president.

For 1947 it is estimated that net sales will be \$3,000,000.00, and net profit (before deducting the compensation of the president and sales manager and before deducting Federal income tax) will be 5 per cent thereof. The Board of Directors has continued the compensation of the two officers on the bonus basis prevailing in 1946. It may be assumed that the Federal income tax rate for 1947 will be 35 per cent.

You are called upon (a) to compute an estimate of 1947 net profit after all deductions, and (b), for comparative purposes, to recompute the net profit for 1946, assuming the rate of Federal income tax in 1946 had been 35 per cent.

# PROBLEM 28

SALE OF PARTNERSHIP

On November 2, 1946, you are called upon by the Monmouth Clothing Company to determine the amount to be paid in cash to each of the partners of the Better Price Garment

Distributors for their business. You are furnished with a copy of a contract dated October 31, 1946, signed by all the parties, under the terms of which the assets and liabilities of the Better Price Garment Distributors were to be taken over on the same date by the Monmouth Clothing Company. Pertinent details of the contract and other information follow:

- (1) C. L. Bodd and Floyd Gesser are the partners. A third partner, George Gash, who was to have had, in addition to a regular commission of 12½ per cent on his sales, a one-eighth interest in the partnership profits (in return for his services as a salesman) from January 1, 1945, was discharged on December 31, 1945, and was given his accrued commissions and \$4,500.00 in cash in lieu of his share in the profits and in full settlement of his interest in the partnership.
- (2) Bodd and Gesser contributed \$50,000.00 and \$20,000.00, respectively, at the outset of the partnership (April 1, 1944), and drew monthly salaries of \$300.00 each which everyone considers a fair compensation for their services as managers. They were to share in any remaining net profit or loss of the business two-thirds and one-third, respectively.
- (3) For their interest in the partnership, Bodd and Gesser are to be paid in cash the sum of the following:
- (a) Assets at their cost less depreciation, if any, less all liabilities, and
- (b) Goodwill, in an amount equal to one-fourth the total net profit for 1944 and 1945. No deduction is to be made for 1946 losses.
- (4) Operating expenses are to be regarded as having accrued in the year in which paid. The cost of merchandise sold and bad debts are to be prorated over each of the various years in proportion to net sales. Inventory depreciation at November 2, 1946, is to be spread three-fifths to 1946, and two-fifths to 1945. Fixture depreciation is to be computed at 10 per cent per annum.

No satisfactory books of account have been kept but you are able to compile an accurate analysis of cash receipts and disbursements as follows:

1914 (from April 1)	Receipts	Disbursements
Capital contributed by partners	\$ 70,000.00	
Bank loan	10,000.00	
Collections from customers	184,062.28	

Withdrawals—Bodd. Withdrawals—Gesser. Merchandise creditors. Operating expenses. Partners' salaries. Fixtures purchased (April 1).		165,24 80,3- 5,40	00.00 00.00 42.18 45.60 00.00 50.00
1945 Collections from customers. Withdrawals—Bodd. Withdrawals—Gesser.	359,391.05		17.20 00.00
Commissions paid to George Gash.  Merchandise creditors.  Final payment to George Gash.		12,50 200,68	00.00
Operating expenses.  Partners' salaries.  Fixtures purchased (July 1)		83,09 7,20	
1946 (to October 31) Collections from customers	11176097	7	
Withdrawals—Bodd.  Merchandise creditors.  Operating expenses.  Partners' salaries.	·	102,45 51,64	
Sales were: 1944 (9 months). 1945. 1946 (10 months).	\$250,922.56		

Of the balance of accounts receivable at October 31, 1946, \$94.545.08, you estimate that \$9,000.00 is uncollectible.

The inventory of merchandise on hand, at cost, is \$44,663.75, and includes \$23,851.52 which had not been paid for at October 31, 1946. It has been agreed that the inventory has depreciated 50 per cent.

Aside from the unpaid purchases, the partnership liabilities consist of the loan from the bank, made in 1944, and unpaid partners' salaries for three months.

#### PROBLEM 29

#### REORGANIZATION ADJUSTMENTS

You are called upon by a committee appointed by certain common stockholders of the Premier Tester Company and certain preferred stockholders of the Premier Corporation to investigate the facts behind the recent organization of the latter company. For the purposes of this problem, your solution is to consist of a redrafting of the balance sheet of Premier Corporation and the auditor's certificate, both of which appeared in a report to stockholders as at August 31, 1946. You are also to prepare a statement of reconciliation between the net worth of the predecessor company, before adjustments, if any, and the net worth of the Premier Corporation as determined by you.

You are permitted access to the books and other records of both companies and from them you ascertain the following

facts:

(1) Premier Tester Company, due to the depression and to possible mismanagement, was in financial difficulties early in 1946, at which time it owed the Foothold State Bank on a demand loan \$150,000.00. A subsidiary of the bank, Foothold Securities Company, was called upon in an attempt to reorganize the finances of the business in such a way that sufficient working capital could be obtained to take care of current obligations. The company had always paid substantial dividends and was deemed capable of earning in excess of \$500,000.00 per annum under a responsible management.

(2) On August 7, 1946, an agreement was drawn up contain-

ing, as its principal provisions, the following:

(a) Parties to the agreement: Premier Tester Company, George Gimmel, and Foothold Securities Company, designated respectively as first, second, and third parties.

- (b) Second party to form a new corporation immediately to be known as Premier Corporation, to be incorporated under the laws of the State of Delaware, and to have authorized issues of 75,000 shares of \$3.00 cumulative preferred no-parvalue stock having a stated value of \$37.50 per share, and 25,000 shares of no-par-value common stock having a stated value of \$1.00 per share; at stockholders' meetings each share of preferred stock to have voting rights equal to each share of common stock.
- (c) Third party agrees (1) to buy, on or before August 31, 1946, all authorized preferred stock of the new company; (2) to pay for same \$40.00 per share in cash or in property, the latter at values as may be determined by the Board of Directors; and (3) to sell such stock to the public, as a new issue, at \$50.00 per share or more.
- (d) First party agrees to sell (vendee not specified) its plant (i.e., fixed assets) for \$1,000,000.00 in cash, and its re-

maining assets (excluding cash) and business, less liabilities, at August 31, 1946, for the 25,000 shares of no-par-value stock of the new company.

The above agreement was at once approved by the stockholders of the Premier Tester Company, and the president, George Gimmel, was authorized to carry out the company's obligations thereunder.

(3) The balance sheet of the Premier Tester Company at August 31, 1946, immediately before its assets were turned over to the new company, was presented to you as follows:

## PREMIER TESTER COMPANY Balance Sheet—August 31, 1946

Assets	sets <u>Liabilities</u>	
Cash. Customers. Inventories. Flant.	158.539.18 47.663.20	Foothold State Bank. \$ 150,000.00 Creditors. 622,485.61 Reserve for depreciation. 1,002,640.95 Capital stock. 5,000,000.00 Deficit. 669,573.70*
	\$6.105.552.86	\$6,105,552.86

<sup>\*</sup>Red.

\*\* Net sound value, per appraisal report of American Appraisal Company as at August 6, 1946, \$1,001,256.54.

(4) Balance sheet and auditors' certificate extracted from printed report to the stockholders of the new corporation (date of incorporation, August 15, 1946):

# PREMIER CORPORATION Balance Sheet—August 31, 1946

		· .
Assets		Liabilities
Cash in bank Receivables (net)		Creditors \$ 347,856.26 Preferred stock 2,812,500.00
Inventories, at cost or less	21.932.79	Common stock 25,000.00 Surplus, available for
Plant	3.050,000.00	dividends 385,475.47
	\$3,570,831.73	<u>\$3,570.S31.73</u>

"We have examined the books and accounts of the Premier Corporation and its predecessor, the Premier Tester Company, as at August 31, 1946, and the agreement dated August 7, 1946, between Premier Tester Company, George Gimmel, its president, and Foothold Securities Company. We hereby

certify that in our opinion the above balance sheet is in conformity with the books and presents a true picture of the financial condition of Premier Corporation at August 31, 1946, subject to the following:

- "(a) Capital assets, \$3,050,000.00, acquired from the predecessor company, have been recorded on the books at values given to them by the Board of Directors, which represent substantial reductions in the value thereof reflected in the books of the predecessor company. Certain nonrecurring charges and other financing, legal, and rehabilitation expenditures totaling \$50,000.00 have been capitalized.
- "(b) Customers' accounts have been valued on the basis of 50 per cent of the receivables from customers appearing on the books of the predecessor company, which we believe to be conservative. Inventories have been depreciated something more than 40 per cent, owing to the desire of the president, Mr. George Gimmel, to meet declining price levels.

SWEET AND SHORT, Accountants and Auditors."

(5) On the books of the Premier Tester Company you find six journal entries recorded after the balance sheet had been prepared. The explanations attached to these entries, except as noted elsewhere, you find are substantially in accord with the facts.

(1)

Cash in bank	\$ 525,370.65
Reserve for depreciation	1,002,640.95
Foothold State Bank	150,000.00
Creditors	274,629.35
Deficit (interest paid but not accrued)	1,000.00
Deficit	3,955,495.01

\$5,899,135.96 10,000.00

Customers.

Sale of plant to Parlous Shearer, nominee for Foothold Securities Company, including assumption by him of certain pressing obligations of our company which he immediately paid off in cash in full, and the assignment to him of an account guaranteed by Foothold Securities Company, the proceeds of which are to be turned over to our company's successor.

Plant account.....

(2)		
Deficit.  Customers.  Estimated loss from bad debts, our company	74,269.59	74,269.59
never having had a reserve therefor and many accounts are now believed uncollectible; authorized by Board of Directors August 31, 1946.		
(3)		
Deficit	25,780.41	25,730.41
Estimated decline of 53.9838 per cent in value of inventory per instructions of Mr. George Gimmel, our president.		20,100.31
( <del>7</del> )		
Capital stock—Premier Corporation.	2.500,000.00	
Creditors	347,856.26	2,751.653.88
Customers		74.269.59
Inventories		21,932.79
ventories, less creditors, in exchange for com-		
mon capital stock of Premier Corporation.		
(5)		
Deficit	525,585.17	*** *** ***
Cash in bank.  Liquidating cash dividend paid pro rata to our		525,585.17
stockholders per authorization of Board of Di-		
rectors August 31, 1946. (6)		
Capital stock.	5,000.000.00	
Deficit		2,500,000,00
Capital stock—Premier Corporation  Distribution to our stockholders, some of whom		2,500,000.00
refuse to surrender their certificates of stock of		
our company, consisting of 25,000 shares of no-par-common stock of Premier Corporation.		
no-par-common stock of Frenier Corporation.		
(6) On the books of the new companing opening entries:	ry you find	the follow-
(1)		
Plant Preferred stock.	\$3.000,000.00	\$2.S12,500.00
Surplus		187.500.00
Purchase from Parlous Shearer of plant, title transferred today, for all of preferred stock		
authorized; and creation of surplus available		
for dividends (under Delaware law, per opinion		
of Mr. F. A. Straight, of counsel), per resolu- tion of Board of Directors and of stockholders.		
both dated August 31, 1946, stock issued as		
follows (by direction letter from Foothold Securities Company):		
ounce company,		

Certificat	æ		
Number	Stockholder	Shares	Consideration
1 2–58	Foothold Securities Company Individual (new) stockholders	50,000 25,000	Plant. \$1,250,000.00 cash (paid to Foothold Securities Com- pany).

The preferred stockholders who have employed you belong to the second group shown immediately above.

(2)				
Customers	S	74,269.59		
Inventories		21,932.79		
Cash in bank		474,629.35		
Creditors		•	.\$	347,856.26
Common stock				25,000,00
Earned surplus.				197,975,47
Receipt of above assets and liabilities in exchange				•
for issue of all no-par stock of 25,000 shares				
having stated value of \$1.00 per share, and				
realization of earned discount on purchase of				
\$197,975.47 from which dividends are payable				
in accordance with above opinion of counsel.				
(3)				
Receivables—Loan to G. Gimmel, president		15,000.00		
Plant, for disbursements to G. Gimmel		12,500.00		
Foothold Securities Company		37,500.00		
Cash in bank		,		65,000.00
Cash disbursements on August 31, 1946; charges				,
to plant authorized by Board of Directors for				
personal services in purchasing the plant at its				
scrap value.				

Cash in bank and the amount owing to creditors on the certified balance sheet of the new company you determine to be correct. The appraisal of the plant you find has been carefully done and the value shown therein corresponds closely to the book value after adjustment for proper allowances for depreciation and obsolescence which have not been made for the last ten years. The plant is old and in a state of poor repair. A 50 per cent reserve for bad debts on accounts with customers (\$74,269.59) you conclude is correct. However, the valuation of the inventories is in excess of the salable merchandise on hand and from information made available to you during your examination, you estimate the correct amount, based on market values which are less than cost, should have been \$5,245.80. You are to provide a goodwill account, if neces-

sary, for any excess of stated values over tangible assets acquired.

### PROBLEM 30

### TRUSTEE'S CONSOLIDATED STATEMENTS

Murray Rand, one of three trustees appointed under the will of the late Arthur Seller, asks you to prepare a consolidated balance sheet of the various interests controlled by the trustees. These interests consist of undistributed income, and 90 per cent of the stock of the Cortex Corporation. The Cortex Corporation owns 96 per cent of the stock of Downey Investments, Ltd., an English corporation. These corporations were established by Mr. Seller for the purpose of holding investments made by him. Mr. Rand, his son-in-law, who has always managed these companies, owns the minority stock of both.

Under the terms of the will, the three trustees are to act as directors of the two corporations, pay the widow a minimum of \$30,000.00 annually for her maintenance, and reinvest any surplus. They may also combine the two corporations or dissolve them at their pleasure. You are informed that the trustees are considering the desirability of an immediate consolidation of the various interests under one head.

You find that the three trustees account for their transactions as follows:

Particulars	Investments in Bonds	Stock of Cortex Corporation	Cash in Bank
On hand at date of death (April 10, 1940)  Dividends from Cortex Corporation  Purchase of bonds  Sale of bonds  Interest received  Distributions to Mrs. Seller  Taxes and expenses	\$186,870.83	\$1,315,155.73	\$297,000.00 186,870.83* 137,647.45 99,023.32 336,966.19* 7,345.28*
Balance—September 30, 1946	\$ 50,062.50	\$1,315,155.73	\$ 2,488.47

The last coupons clipped from the 6 per cent bonds on hand on September 30, 1946, bore the date of September 15, 1946. The par value of the bonds is \$50,000.00, and their cost and present market value \$50,062.50. The investment in the Cor-

tex Corporation is shown at the value reported for Federal estate tax purposes which the trustees believe to be fair. This value represents the original cost of \$900,000.00 plus appreciation of securities and the gain from conversion of the foreign holdings at the then current rate of exchange.

The Cortex Corporation was established on July 1, 1936. You find that its financial position on various dates has been as follows:

Assets	July <u>1, 1936</u>	April 10, 1940	September 30, 1946
Cash in banks		\$ 124,528.20 1,905,724.91 15,733.60 336,303.36	\$ 195,353.39 1,628,958.52 37,692.08 336,303.36
Liabilities and Net Worth	\$1,000,000.00	\$2,382,290.07	\$2,198,307.35
Notes payable	\$1,000,000.00	\$1,036,000.00 1,000,000.00 346,290.07	\$ 436,000.00 1,000,000.00 762,307.35
	\$1,000,000.00	\$2,382,290.07	\$2,198,307.35

For Federal estate-tax purposes, the investments at April 10, 1940, were valued at \$1,986,324.87, their market value at that date. Of this amount, securities which cost \$775,692.00 and had a market value of \$789,620.00 at April 10, 1940, were on hand at September 30, 1946. The market value of all the securities at the latter date was \$1,702,340.90.

Balance sheets of Downey Investments, Ltd., which was incorporated as at January 1, 1940, were:

Assets	January 1, 1940	April 10, 1940	September <u>30, 1946</u>
Cash in bank	£ 74,000	£ 25,000 105,000	£ 64,000 100,000
	£ 74,000	£130,000	£164,000
Liabilities and Net Worth			
Note payable	£ 74,000	£ 50,000 74,000 6,000	£ 74,000 90,000
	£ 74,000	£130,000	£164,000

Name	Original Contribution	Share in Profit or Loss	Capital Account July 1, 1946
д В С	V	26 26 26 16	\$ 41.\$16.\$\$ 48.4\$4.62 12.514.\$7
Totals	69,669,943		\$102,765.87

Included in the assets and liabilities were the following balances of personal accounts:

<u>Zams</u>	$\underline{\mathbf{D}_{7}}$ .	<u>C7.</u>
4		
B		\$ 236,43
<i>C</i>		4.860.54
	\$3,002,66	\$4.598.97

The net assets, exclusive of partners' personal accounts, and of \$10,205.20 cash on hand, were sold for \$85,000.00, of which \$25,000,00 was to be paid immediately in cash and the balance in four equal annual installments without interest. In case any of the four installments were missed, the business was to revert to the three partners without reimbursement for any installments already paid. You were called in to devise a plan of distributing the payments among the partners. They informed you that the success of the new proprietors was not assured, and that if they (the partners) were compelled to take the business back, the remaining assets would be of little. if any, value. Having devised a plan of distribution, you are now recalled, three years later, and informed that the third of the four installments was not paid. Accordingly, the business is returned to the partners, the net assets being worth 825,400,00.

Prepare a schedule showing how you would have handled these matters for the partners, assuming that the debit balance in A's account at the time of the sale was a withdrawal of profit for 1946, and that the other two partners, on the first distribution, were entitled to withdrawals proportionate to A's current overdraft, notwithstanding any excess of withdrawals in previous years.

### PROBLEM 32

### STATEMENTS OF FARM CORPORATION

In 1942, a certain group of businessmen, believing that farm land values had reached bottom following a rapid decline of prices, decided to acquire for operation and speculation several financially distressed farms adjoining each other in the Middle West. Accordingly, the Western Farms Corporation was organized in 1943 with an authorized capital of \$250,000.00 represented by 2,500 shares of common stock, par value \$100.00. Four farms were acquired by the corporation, the details of the purchases appearing in the journal entries shown below. A set of books, on the accrual basis, was opened March 1, 1943, and financial statements were prepared each year therefrom.

The venture, however, proved unprofitable, and with land values declining, the company, on February 15, 1946, removed all its personal property from the farms known as Three and Four, gave a quit-claim deed to the second-mortgage-holder on Farm Three, which was accepted by him, and notified the holder of the mortgage on Farm Four of its abandonment and intention to default on further mortgage interest and principal payment. The fair market value of Farm Three was estimated to be \$40,000.00 and of Farm Four, \$5,000.00. In connection with the abandonment, the bookkeeper made a journal entry on the books which he believed was proper, but did not post to the general ledger.

From the following trial balance and particulars prepare (1) a profit-and-loss statement for the year ending February 28, 1946, and (2) a balance sheet at February 28, 1946, which in your opinion correctly reflects the financial condition of the company.

Trial Balance-February 28, 1946

Title Delicition 1 obtained 100,	27 20	
Account	$\underline{\mathrm{Dr.}}$	Cr.
Cash in bank.	\$ 459.60	
Advance to employees	175.00	
Unexpired fire and tornado insurance	1,535.39	
Due from Farmers Co-operative Elevator Co	17,673.34	
Horses and harnesses	875.00	
Inventory of cattle and hogs at market value, Feb-		
ruary 28, 1946	11,918.20	
Inventory of crops at market value, February 28,		
1946	4,931.10	
Land	705,290.00	
Buildings and improvements	77,109.58	

Reserve for depreciation on buildings and improvements	§ 13.324.67	\$ 5.940.35
		0.000.50
ment		2.932.50
Accounts payable		29,167.40
Chattel mortgage notes payable, dated February		
28, 1945, and due February 28, 1947		21.392.\$5
Accrued taxes payable		12.837.65
Accrued interest payable		31,115.27
Acerued wages—February 28, 1946		300.00
First mortgages payable		471.867.35
Second mortgages payable		117.589.00
Loans from officers of company		22.688.41
Capital stock, 2,100 shares		210.000.00
Surplus, balance February 28, 1945	66.355.06	
Income from sale of cattle		29.844.50
Income from sale of hogs		6.435.69
Income from sale of wheat		16.900.24
Income from sale of corn		8.616.54
Income from sale of hay		450.00
Market value (February 28, 1946)—		500.00
Market vaide (repress) 25, 1840;—		0.107.50
Corn harvested and retained.		2.165.50
Wheat harvested and retained		1.890.60
Hay harvested and retained		\$75.00
Market value of crops harvested and fed to stock		
during the year		7,363,45
Settlement received from railroad company for		
losses in shipment of cattle		1,500.00
Farm manager's salary	1,500.00	21000100
Farm labor—cattle and hogs.	1,162.50	
	3,409.00	
Farm labor—crops.		
Cattle and hog feed purchased and used	5.831.40	
Market value of own corn crop fed to stock	5.313.45	
Market value of own hay crop fed to stock	2.050.00	
Inventory adjustment account	44.321.75	
Machinery operating expense and repairs	2,496.50	
Building repairs	344.75	
Depreciation-farm machinery (to February 28,		
1946)	1,350.00	
Depreciation—buildings to February 28, 19461	4,374.92	
Administrative expenses.	3,640.25	
Town (ormans)		
Taxes (expense)	5.297.99	
Miscellaneous supplies	547.69	
Interest expense	20,285,16	
	\$1,001,872.30	\$1,001,872.30
	£1,001,012.00	VI.CVI.OI.LOV

# Journal entries covering purchases of farm properties follow:

# 

and Three, su listed below s	ıyable	One, Two, sthereon as		\$451,867.35 117,589.00 189,943.23
Farm One Two Three	31,400.50	Appraised Value of Land \$492,290.00 125,000.00 65,000.00 \$682,290.00	First Mortgages \$326,867.35 75,000.00 50,000.00 \$451.867.35	Second  Mortgages \$ 92,589.00 15,000.00 10,000.00 \$117,589.00
Detail	of Mortgages Pay	able on Above	In	iterest Rate er Annum,
Farm Date D	awn Date I	Dira Jan	ount Se	Payable emiannually
			<del></del>	
One 3- 1			\$67.35	6 %
One 12- 1 Two 6-15			589.00 000.00	614
Two 11–20			00.00	6 6 <u>1</u> 4
Three 9-1			00.00	6
Three 9-1			00.00	6 <u>1</u> 5
	on properties pu		<del></del>	-/-
	_		<del></del>	
chase money	ble	and record pr	 .r- te,	\$20,000.00 3,000.00
	$F\epsilon b r \epsilon$	uary 15, 1946		
First mortgages payab Second mortgage paya Loss on abandonment Land	leble	d Four.	10,000.00 \$,000.00	
Analosia	of Accrued Taxes	Darable Feb	om 20 1046	
-		•	- ,	
	paid general prope ar 1944			

0 1 45	Deleves Huneid reports reports tower on Former One and	•
3-1-45	Balance—Unpaid general property taxes on Farms One and Two for calendar year 1944	6,413.99
8-1-45	General property taxes on Farms One and Two for first half	
0 1 15	of calendar year 1945	4,250.13
S-1-45	General property taxes on Farm Three for first half of calendar year 1945	904.61
2-1-46	General property tax on Farm Four for calendar year 1945	143.25
	Total per general ledger	\$12.837.65
Th	e real estate tax rate for the current year is deter	mined in
	ary of that year and taxes billed in two installa	
	e 30 and December 31. No change in rate or	
	ions were made in 1946.	associoa
\ arado	ions were made in 1010.	•
	Analysis of Taxes (Expense), February 28, 1946	
S- 1-45	General property taxes on Farms One and Two for the first	
	half of calendar year 1945	\$ 4,250.13
8- 1-45	General property taxes on Farm Three for first half of calendar year 1945	904.61
2- 1-46	General property tax on Farm Four for calendar year 1945	143.25
	otal per general ledger	9 5 207 00
1	otal per general leager	\$ 5,297.99
	Analysis of Accrued Interest Payable February 28, 1946	
3- 1-15	•	
00	First mortgage on Farm One, to February 28, 1945	\$ 9,806.02
	Second mortgage on Farm One, to February 28, 1945	1,504.57
	First mortgage on Farm Two, to February 28, 1945 (in arrears)	3,250.00
	Second mortgage on Farm Two, to February 28, 1945 (in	0,200.00
	arrears)	1,002.02
8-31-45	Six months' accrued interest on first and second mortgages on Farms One and Two, as charged to interest expense	
	account	15,552.66
	Total per general ledger.	
	Total per general leager	CO1,110.21
	Analysis of Interest Expense, February 28, 1946	
8-31-45	First mortgage on Farm One, 6 months accrued	\$ 9,806.02
8-31-45	Second mortgage on Farm One, 6 months accrued	3.009.14
8-31-45		2,250.00
S-31-45 9- 1-45		487.50
G 1 10	due September 1, 1945	1,825.00
9- 1-45	Interest paid on mortgage on Farm Four, due September 1,	•
2-28-46	1945	600.00 $1,497.50$
2-28-46		\$10.00
	Total per general ledger	
	Total per general leager	C20,20,10

### Analysis of Inventory Adjustment Account, February 28, 1946

Date	Particulars	$\underline{\mathbf{Dr.}}$	$\underline{\text{Cr.}}$
	Inventory of crops on hand at 2-28-45	\$ 7,644.59	
	Inventory of cattle and hogs on hand at 2-23-45	48,595.36	
8- 1 <del>-1</del> 5	To set up cattle and hog inventory at August		
	1, 1945		\$29,836.74
11- 1-45	To set up cattle and hog inventory at Novem-		10 /== 0=
0.00.40	ber 1, 1945		13,457.95
2-28-10	To set up cattle and hog inventory at February 28, 1946		11,918.20
2-28-46	To adjust inventory account of cattle and hogs	43,294.69	11,910.20
		\$99,534.64	\$55,212.89
	Balance per general ledger		44,321.75
		\$99,534.64	\$99,534.64

## PROBLEM 33

### STATEMENTS OF MANUFACTURING COMPANY

From the following information, you are asked to prepare a balance sheet as of June 30, 1946, of the *M* Company, which is to be used for credit purposes, and statements for the year ending June 30, 1946, of profit and loss and of cost of goods sold.

Trial Balance

		0, 1946
$\underline{ ext{Account}}$	$\underline{\mathrm{Dr.}}$	$\underline{\text{Cr.}}$
First National Bank	\$ 5,675.13	
Notes receivable (for machines sold on deferred time payments)	200,435.17	
Accounts receivable (for machines sold on open account and for repairs)	100,128.35	
Reserve for loss on customers' receivables Unexpired fire insurance premiums	749.49	\$ 6,613.77
Cash surrender value of officer's life insurance policy on which the M Company is beneficiary	773.50 16,708.35	
Material purchases, July 1, 1945, to June 30, 1946.	94,790.57	
Cost of material used in manufacture and cost of repairs sold.	•	87,873.15
Factory and office equipment	8,398.54	
ment	5,590.00	5,831.47
Reserve for depreciation on automobiles	•	615.60 5,213.12
Salesmen's commission ledger	10,731.40	•
Accrued officer's salary		2,325.84 435.67

Unearned income from finance charges at June 30, 1946		6,225,00
Reserve for advertising.		5.860.00
Dividends payable on common stock, declared August		
		47,000.00
2, 1945		•
June 30, 1946	3,500.00	
Capital stock, 7% preferred, par value \$100.00 per		
share, authorized and issued.		50,000.00
Capital stock, 2,000 shares of common stock, no-par		
value, authorized and issued		10,000.00
Surplus.		62,147.19
Machine sales, 586 units at \$600 each		351,600.00
Machine repair sales.  Material cost of machines manufactured	\$3,741.90	35,729.34
Material cost of repairs sold.	4,131.25	
Direct labor on machines manufactured.	18.000.86	
Direct labor on repairs sold.	3,000.14	
Indirect labor—Superintendent's salary.	4.800.00	
Freight and cartage on machines shipped	2,144.30	
Parcel post and shipping expense on repairs sold	2,532.96	
Rent for factory and general office	7,200.00	
Power and light—Factory	1,342.18	
Depreciation—Factory equipment	639.85	
Fire insurance expense.	968.50	
Personal property tax	452.50	
Commissions allowed salesmen.	42,662.85	
Miscellaneous sales expense.	6.342.95	
Officer's salary	24.000.00	
Office salaries.  Printing and advertising.	10,298.50 14,834.27	
Depreciation on automobiles and fixtures	1,597.50	
Premiums on officer's life insurance policy.	753.90	
Loss on bad accounts.	3,673.29	
Other general expenses.	13,071.79	
Interest and finance charges earned on deferred time		
sales		16.199.84
	\$693.669.99	\$693,669.99

The books of the *M* Corporation are on the accrual basis, with the fiscal year ending June 30. The company is engaged in the manufacture and sale of a paint-spraying machine. The sales price of the machine is \$600.00 if paid for in cash within 30 days. A charge of \$30.00 is made for interest and financing expense on deferred payment sales which are evidenced by conditional-sales contracts and 12 notes payable monthly.

During the past fiscal year, the company adopted the policy of sending machines out on 60 days' trial. The bookkeeper regards such trial orders as regular sales. At June 30, 1946, an analysis of accounts receivable disclosed 40 trial orders. Of this number, 20 machines were placed by salesmen on which a credit of \$100.00 per machine had been made in their unearned commission accounts in the salesmen's commission ledger.

An analysis of the salesmen's commission ledger discloses the following condition:

	Cash	Unearned
<u>Particulars</u>	Advances	Commission
Accounts with—		
Former salesman, considered uncollectible	\$ 6,342.50	\$ 100.00
Active salesmen	18,345.90	13,857.00
Totals	\$24,688.40	\$13,957.00

The 20 trial sales mentioned above were made by active salesmen. In view of the past experience of the company with drawing accounts of active salesmen, a reserve of 50 per cent of the excess of advances over unearned commissions should be established.

As authorized by the Board of Directors, the president of the company, owner of 50 per cent of the outstanding stock, and the only officer receiving compensation for his services, is given as salary an amount equal to 25 per cent of the annual net profit of the company before deducting Federal income tax and the salary as an expense. During the year, the book-keeper has made an entry each month debiting officer's salary account and crediting accrued officer's salary account for \$2,000.00.

In the manufacture of the paint-spraying machines, the M Company buys the castings and other parts required to assemble a complete machine. A perpetual inventory record is maintained, and at June 30, 1946, all records, including the accounts in the general ledger, were adjusted to conform to the physical inventory taken on that date. Test-checks indicate that the pricing is at cost or market, whichever was the lower, and that extensions, footings, and quantities were correct. No completed or partially completed machines were in stock at either the opening or closing inventory dates.

You are to consider that three-fourths of the rent, fire insurance, and personal property tax is applicable to the factory and the balance to the general office. Also, all factory overhead is to be distributed between the cost of machines manu-

factured and the cost of repair sales on the basis of direct labor cost.

For the purpose of establishing a reserve for magazine advertising to be used during the ensuing fiscal period, the company authorized the bookkeeper to debit printing and advertising account and credit reserve for advertising account \$10.00 for each machine sold during the current fiscal period.

The reserve for loss on customers' receivables is considered ample.

The Federal income-tax liability of the M Company at June 30, 1946, is \$14,963.22.

## PROBLEM 34

### STATEMENTS OF SYNDICATE

In January, 1943, the Geneva Park Estates (a common-law trust) purchased a 640-acre tract of land on Pine Lake for the sum of \$100,000.00. A portion of the tract, to be known as Unit No. 1, and valued at two-fifths of the cost of the tract, was immediately subdivided into 200 lots, which were equally priced and offered for sale on terms requiring annual payments of 10 per cent of the contract price. The sales prospectus stipulated that the Geneva Park Estates was to lay out roads, install water service, and build a pier on the lake front. Competent engineers estimated that these improvements would cost \$10,000.00, and up to and including December 31, 1945, a total of \$8,465.73 had been spent thereon, with good prospects of the work being finished for the estimated amount. The improvements conferred equal benefits on each of the 200 lots.

A set of books was opened in January, 1943. Lot sales and the profit therefrom were handled according to the "cost-recovery" method, whereby cash collections are first applied to the recovery of costs, and after such costs are recovered, further collections are considered as earned gross profit. When a sale was made, the bookkeeper debited accounts receivable, Unit No. 1, and credited unearned gross profit on sales; at the same time he debited unrecovered cost of lots sold, Unit No. 1, and credited inventory of unsold lots, Unit No. 1, for the cost of the lot. At the end of each year, a journal entry was made adjusting the accounts of unrecovered cost of lots sold and

unearned gross profit on sales, according to the cash collections received during the year.

In 1946, the manager of the trust, believing that it would be more advantageous to accrue income by the "installment" rather than "cost-recovery" method, hands you the following cumulative trial balances, together with certain other information, and asks you to prepare (1) the necessary adjusting journal entries to effect the change, including therein a recomputation of costs based on good accounting practice, (2) a statement of profit and loss in columnar form for the years 1943, 1944, and 1945, respectively, and (3) a balance sheet as of December 31, 1945.

Accounts   1943   1944   1945	Cumulative Trial Balance		alance		
Debit balances—         Cash in bank         \$ 1,994.34         \$ 1,097.37         \$ 2,216.26           Petty cash         50.00         50.00         50.00           Accounts receivable—Unit No. 1         17,425.00         33,440.00         53,940.00           Sundry receivables         275.00         695.00         1,100.00           Inventory of unsold lots—Unit No. 1         36,000.00         32,000.00         24,000.00           Inventory of unsubdivided acreage         60,000.00         60,000.00         60,000.00           Inventory of unsubdivided acreage         60,000.00         60,000.00         60,000.00           Inventory of unsubdivided acreage         60,000.00         60,000.00         60,000.00           Unrecovered cost of lots sold         1,425.00         1,440.00         1,500.00           Tractor, tools, and implements         700.00         700.00         700.00           Office furniture         300.00         300.00         300.00           Improvements in Unit No. 1         3,500.00         7,385.46         8,465.73           Improvements in unsubdivided acreage         3,500.00         5,040.42         6,825.92           General and administrative expenses         3,349.58         6,698.75         9,345.68           Commissi		December 31			
Cash in bank       \$ 1,994.34       \$ 1,097.37       \$ 2,216.26         Petty cash       50.00       50.00       50.00         Accounts receivable—Unit No. 1       17,425.00       33,440.00       53,940.00         Sundry receivables       275.00       695.00       1,100.00         Inventory of unsold lots—Unit No. 1       36,000.00       32,000.00       24,000.00         Inventory of unsubdivided acreage       60,000.00       60,000.00       60,000.00         Unrecovered cost of lots sold       1,425.00       1,440.00       1,500.00         Tractor, tools, and implements       700.00       700.00       700.00         Office furniture       300.00       300.00       300.00         Improvements in Unit No. 1       3,500.00       7,385.46       8,465.73         Improvements in unsubdivided acreage       3,500.00       5,040.42       6,825.92         General and administrative expenses       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—       \$2,093.67	Accounts	1943	1944	1945	
Petty cash.         50.00         50.00         50.00           Accounts receivable—Unit No. 1.         17,425.00         33,440.00         53,940.00           Sundry receivables.         275.00         695.00         1,100.00           Inventory of unsold lots—Unit No. 1.         36,000.00         32,000.00         24,000.00           Inventory of unsubdivided acreage         60,000.00         60,000.00         60,000.00         60,000.00           Unrecovered cost of lots sold         1,425.00         1,440.00         1,500.00         700.00         700.00         700.00         700.00         700.00         700.00         700.00         700.00         700.00         700.00         300.00	Debit balances—				
Accounts receivable—Unit No. 1.       17,425.00       33,440.00       53,940.00         Sundry receivables.       275.00       695.00       1,100.00         Inventory of unsold lots—Unit No. 1.       36,000.00       32,000.00       24,000.00         Inventory of unsubdivided acreage       60,000.00       60,000.00       60,000.00         Unrecovered cost of lots sold       1,425.00       1,440.00       1,500.00         Tractor, tools, and implements       700.00       700.00       700.00         Office furniture       300.00       300.00       300.00         Improvements in Unit No. 1       3,500.00       7,385.46       8,465.73         Improvements in unsubdivided acreage       3,500.00       5,040.42       6,825.92         General and administrative expenses       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       8130,893.92       \$155,132.50       \$180,031.74         Credit balances—       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       \$2,000.00       10,000.00       100,000.00       100,000.00	Cash in bank	\$ 1,994.34	\$ 1,097.37	\$ 2,216.26	
Sundry receivables       275.00       695.00       1,100.00         Inventory of unsold lots—Unit No. 1       36,000.00       32,000.00       24,000.00         Inventory of unsubdivided acreage       60,000.00       60,000.00       60,000.00         Unrecovered cost of lots sold       1,425.00       1,440.00       1,500.00         Tractor, tools, and implements       700.00       700.00       700.00         Office furniture       300.00       300.00       300.00         Improvements in Unit No. 1       3,500.00       7,385.46       8,465.73         Improvements in unsubdivided acreage       3,500.00       5,040.42       6,825.92         General and administrative expenses       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       \$10,000.00       100,000.00       100,000.00         Earned gross profit on sales	Petty cash				
Inventory of unsold lots—Unit No. 1. 36,000.00 32,000.00 24,000.00		17,425.00	33,440.00		
Inventory of unsubdivided acreage					
Unrecovered cost of lots sold. 1,425.00 1,440.00 1,500.00 Tractor, tools, and implements. 700.00 700.00 700.00 Office furniture. 300.00 300.00 300.00 Improvements in Unit No. 1. 3,500.00 7,385.46 8,465.73 Improvements in unsubdivided acreage. 3,500.00 5,040.42 6,825.92 General and administrative expenses. 3,349.58 6,698.75 9,345.68 Commissions paid on sale of lots. 2,000.00 5,000.00 9,752.50 Interest paid. 375.00 1,285.50 1,835.65  Total debits. \$130,893.92 \$155,132.50 \$180,031.74  Credit balances— Accounts payable. \$2,093.67 \$ 916.58 \$ 1,213.63 Notes payable. \$10,000.00 17,000.00 10,000.00 Capital account. 100,000.00 100,000.00 100,000.00 Earned gross profit on sales. 7,560.00 Unearned gross profit on sales. 17,425.00 33,440.00 53,940.00 Interest earned. 1,375.25 3,775.92 7,318.11	Inventory of unsold lots—Unit No. 1.	36,000.00	32,000.00		
Tractor, tools, and implements       700.00       700.00       700.00         Office furniture       300.00       300.00       300.00         Improvements in Unit No. 1       3,500.00       7,385.46       8,465.73         Improvements in unsubdivided acreage       3,500.00       5,040.42       6,825.92         General and administrative expenses.       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—         Accounts payable       \$2,093.67       \$916.58       \$1,213.63         Notes payable       10,000.00       17,000.00       10,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11	Inventory of unsubdivided acreage	60,000.00	60,000.00	60,000.00	
Office furniture.         300.00         300.00         300.00           Improvements in Unit No. 1.         3,500.00         7,385.46         8,465.73           Improvements in unsubdivided acreage.         3,500.00         5,040.42         6,825.92           General and administrative expenses.         3,349.58         6,698.75         9,345.68           Commissions paid on sale of lots.         2,000.00         5,000.00         9,752.50           Interest paid.         375.00         1,285.50         1,835.65           Total debits.         \$130,893.92         \$155,132.50         \$180,031.74           Credit balances—         \$2,093.67         \$916.58         \$1,213.63           Notes payable.         \$2,093.67         \$916.58         \$1,213.63           Notes payable.         10,000.00         17,000.00         100,000.00           Capital account.         100,000.00         100,000.00         100,000.00           Earned gross profit on sales.         7,560.00           Unearned gross profit on sales.         17,425.00         33,440.00         53,940.00           Interest earned.         1,375.25         3,775.92         7,318.11	Unrecovered cost of lots sold	1,425.00	1,440.00	1,500.00	
Office furniture.         300.00         300.00         300.00           Improvements in Unit No. 1.         3,500.00         7,385.46         8,465.73           Improvements in unsubdivided acreage.         3,500.00         5,040.42         6,825.92           General and administrative expenses.         3,349.58         6,698.75         9,345.68           Commissions paid on sale of lots.         2,000.00         5,000.00         9,752.50           Interest paid.         375.00         1,285.50         1,835.65           Total debits.         \$130,893.92         \$155,132.50         \$180,031.74           Credit balances—         \$2,093.67         \$916.58         \$1,213.63           Notes payable.         \$2,093.67         \$916.58         \$1,213.63           Notes payable.         10,000.00         17,000.00         100,000.00           Capital account.         100,000.00         100,000.00         100,000.00           Earned gross profit on sales.         7,560.00           Unearned gross profit on sales.         17,425.00         33,440.00         53,940.00           Interest earned.         1,375.25         3,775.92         7,318.11	Tractor, tools, and implements	700.00	700.00	700.00	
Improvements in Unit No. 1.       3,500.00       7,385.46       8,465.73         Improvements in unsubdivided acreage.       3,500.00       5,040.42       6,825.92         General and administrative expenses.       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots.       2,000.00       5,000.00       9,752.50         Interest paid.       375.00       1,285.50       1,835.65         Total debits.       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—       \$2,093.67       \$916.58       \$1,213.63         Notes payable.       \$2,093.67       \$916.58       \$1,213.63         Notes payable.       100,000.00       17,000.00       100,000.00         Earned gross profit on sales.       7,560.00       7,560.00         Unearned gross profit on sales.       17,425.00       33,440.00       53,940.00         Interest earned.       1,375.25       3,775.92       7,318.11	Office furniture	300.00	300.00	300.00	
age       3,500.00       5,040.42       6,825.92         General and administrative expenses.       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—        Accounts payable       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       10,000.00       17,000.00       100,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11	Improvements in Unit No. 1	3,500.00	7,385.46	8,465.73	
age       3,500.00       5,040.42       6,825.92         General and administrative expenses.       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—        Accounts payable       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       10,000.00       17,000.00       100,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11	Improvements in unsubdivided acre-	•		-	
General and administrative expenses.       3,349.58       6,698.75       9,345.68         Commissions paid on sale of lots.       2,000.00       5,000.00       9,752.50         Interest paid.       375.00       1,285.50       1,835.65         Total debits.       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—        \$2,093.67       \$916.58       \$1,213.63         Notes payable.       10,000.00       17,000.00       100,000.00         Capital account.       100,000.00       100,000.00       100,000.00         Earned gross profit on sales.       7,560.00       7,560.00         Unearned gross profit on sales.       17,425.00       33,440.00       53,940.00         Interest earned.       1,375.25       3,775.92       7,318.11		3,500.00	5,040.42	6,825.92	
Commissions paid on sale of lots       2,000.00       5,000.00       9,752.50         Interest paid       375.00       1,285.50       1,835.65         Total debits       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances—        Accounts payable       \$2,093.67       \$ 916.58       \$ 1,213.63         Notes payable       10,000.00       17,000.00       10,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11		3,349.58	6,698.75	9,345.68	
Interest paid.       375.00       1,285.50       1,835.65         Total debits.       \$130,893.92       \$155,132.50       \$180,031.74         Credit balances— <ul> <li>Accounts payable.</li> <li>\$2,093.67</li> <li>\$916.58</li> <li>\$1,213.63</li> <li>Notes payable.</li> <li>100,000.00</li> <li>17,000.00</li> <li>100,000.00</li> <li>100,000.00</li></ul>		2,000.00	5,000.00	9,752.50	
Credit balances—         Accounts payable.       \$ 2,093.67 \$ 916.58 \$ 1,213.63         Notes payable.       10,000.00 17,000.00 10,000.00         Capital account.       100,000.00 100,000.00 100,000.00         Earned gross profit on sales.       7,560.00         Unearned gross profit on sales.       17,425.00 33,440.00 53,940.00         Interest earned.       1,375.25 3,775.92 7,318.11			1,285.50	1,835.65	
Accounts payable.       \$ 2,093.67 \$ 916.58 \$ 1,213.63         Notes payable.       10,000.00 17,000.00 10,000.00         Capital account.       100,000.00 100,000.00 100,000.00         Earned gross profit on sales.       7,560.00         Unearned gross profit on sales.       17,425.00 33,440.00 53,940.00         Interest earned.       1,375.25 3,775.92 7,318.11	Total debits	\$130,893.92	\$155,132.50	\$180,031.74	
Notes payable       10,000.00       17,000.00       10,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11	Credit balances—				
Notes payable       10,000.00       17,000.00       10,000.00         Capital account       100,000.00       100,000.00       100,000.00         Earned gross profit on sales       7,560.00         Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11	Accounts payable	\$ 2,093.67	\$ 916.58	\$ 1,213.63	
Capital account.       100,000.00       100,000.00       100,000.00         Earned gross profit on sales.       17,425.00       33,440.00       53,940.00         Interest earned.       1,375.25       3,775.92       7,318.11	Notes payable		17,000.00		
Earned gross profit on sales.       7,560.00         Unearned gross profit on sales.       17,425.00       33,440.00       53,940.00         Interest earned.       1,375.25       3,775.92       7,318.11	Capital account				
Unearned gross profit on sales       17,425.00       33,440.00       53,940.00         Interest earned       1,375.25       3,775.92       7,318.11		•	,		
Interest earned		17,425.00	33,440.00		
Total credits	Interest earned				
	Total credits	\$130,893.92	\$155,132.50	\$180,031.74	

# Sales of lots for the 3 years were as follows:

Year	<u>Particulars</u>	Amount	
1943	20 lots at \$1,000.00 each	\$20,000.00	
1944	20 lots at \$1,000.00 each	20,000.00	
1945	40 lots at \$900.00 each	36,000.00	

### Cash collections were:

Year	<u>Particulars</u>	Amount
1943	on 1943 sales	\$ 2,575.00
1944	on 1943 sales	\$ 985.00
	on 1944 sales	3,000.00
	Total	\$ 3.985.00
1945	on 1943 sales	\$ 4,000.00
	on 1944 sales	5.000.00
	on 1945 sales	6,500.00
	Total	\$15,500.00

In lieu of depreciation on the tractor, tools, and implements, and office furniture, the total is to be treated as an additional cost of development and prorated on the basis of the original cost of the tract.

Disregard Federal income-tax liability, if any.

### PROBLEM 35

### BOOK VALUE OF STOCK

The net worth section of the balance sheet of the Simmons Athletic Company at December 31, 1945, appeared as follows:

Net Worth:	
Capital stock—	
6% cumulative nonparticipating preferred stock;	
authorized and outstanding, 1,000 shares, par	
value \$100.00	\$100,000.00
No-par common stock; 40,000 shares authorized,	
10,000 outstanding (no minimum or stated value)	42,030.00
Paid-in surplus	50,000.00
Earned surplus—	
Balance—January 1, 1945	
Profit for year ending December 31, 1945 11.630.41	
	48,049.68
Total net worth	\$240.079.68

No dividends had been paid on the preferred stock for 3 years.

At a meeting of the preferred and common stockholders on May 15, 1946, a resolution was passed whereby 20 shares of nopar common stock were to be issued for each share of preferred stock and dividends accrued thereon to December 31, 1945.

From May 15 to December 15, 1946, 915 shares of preferred stock were retired, the remaining preferred shareholders refusing to accept the exchange. Dividends on these shares continue to accumulate, but no special consideration was given shareholders who made the exchange during 1946 for dividends accrued to the date on which the transfer was made.

The Board of Directors, at a meeting on December 28, 1946, voted a 4 per cent stock dividend payable in no-par common stock to common stockholders of record on that date; they also voted a bonus of 4.528 shares of no-par common to certain officers for past services, to be issued to them on December 31, 1946.

Profits for the year ending December 31, 1946, were \$12,603.90.

You are required (a) to set up the net worth section of the balance sheet as it should appear on December 31, 1946, showing changes in the capital stock and earned surplus sections of the balance sheet during the year, and (b) to compute the book value of each share of common and preferred stock at December 31.1946.

### PROBLEM 36

### Personal Income Tax

A. M. Fare's taxable gross income for the calendar year 1946 consisted entirely of gains and losses from stocks and bonds and other assets owned by him. Mr. Fare is unmarried. His secretary has prepared the following summary of transactions from which you are asked to determine his net income for Federal income-tax purposes:

1045		
Terrer ?	Sale to Field Museum of Natural History of prehis- teric pottery received as gift from Ojibway Indians in 1922	\$523.15
January 28	Sale of stock rights in Larson Company, representing rights to purchase 20 shares of common stock on 100 shares of common stock purchased in 1929 at \$45.40 per share and having a market value today	
	of \$55 persiare, ex-rights (vou are to prorate cost)	120.00
Msy 6	Sale of 50 shares of above stock of Larson Company	1.750.00
Msy S	Sale short of 50 shares of Larson Company stock: covered two weeks later by remaining 50 shares	
	०ल्यां	1.325.00

June 9	Purchased for each a \$5,000.00 first mortgage, dated January 2, 1946, and maturing January 2, 1951,	<b>=</b> 00.00
July 29	for \$4,500.00; discount	500.00
October 10	cash settlement of	250.00
November 10	1945, compromised for	3,800.00
	Cash. 125.00	500.00
November 15	Sold 100 shares Bright Moon A common stock, costing \$2,900.00 for	350.00
December 1	Renewed subscriptions expiring November 30 to the following financial services—	
	Moody's Investors' Service \$ 250.00 Investors' Counsel Service 500.00	
	Wall Street Journal	775.00
December 6	Bought 200 shares Bright Moon A common stock for	600.00
December 31	Summary of 1946 operations of a 36-apartment building—  Rents collected\$22,320.00	00.00
	Expenses paid—	
	Real estate taxes	
	Total expenses	
	Net profit	7,482.00
	The building was constructed in 1942 at a cost of \$210,000.00. Depreciation is deductible at the rate of $2\frac{1}{2}$ % per annum.	
December 31	Contributions for the year consisted of the following—	
	United Charities	
	Republican campaign fund	
	which \$100.00 was paid in 1946 500.00	650.00
December 31	Interest and dividends were received as follows:  Interest—	
	On 2% tax-free covenant bonds \$ 3,560.00	

### PROBLEM 37

### TRANSACTIONS OF RECEIVER

Certain stockholders and directors of the R Dairy Company became suspicious of the integrity of the vice-president and general manager; they engaged Orville Hemingway as their representative to take over the business and to continue operations until such time as he could reach a decision as to the desirability of continuing the business. Although the books had been audited at December 31, 1944, it was agreed to dispense with the 1945 audit.

Mr. Hemingway took actual possession of the property on January 16, 1946, but his stewardship dates from January 1, 1946. He operated the business until August 31, 1946, when you were called in to audit the books.

Prepare worksheets which will indicate the adjusted real and nominal accounts at December 31, 1945, and August 31, 1946.

You are given the following financial statements as of December 31, 1945, prepared by the company's bookkeeper:

Exhibit I

R DAIRY COMPANY

Balance Sheet-December 31, 1945

1 mate

Machinery, Automobiles, Etc.:	:			
Particulars	Cost	Reserve for Depreciation		ì
Machinery and equipment. Automobiles. Horses and wagons. Furniture and fixtures	\$\$2,751.25 16,250.52 5,562.46 4,549.34	\$21,248.75 9,944.45 2,064.54 1,890.22	\$11,502.50 6,306.07 3,497.92 2,659.12	
Totals	\$59,113.57	\$35,147.96	\$23,965.61	23,965.61
Goodwill				29,703.01
Total assets				\$178,663.25
Lia	bilities and	Net Worth		
Current Liabilities: Accounts payable Employees' deposits Notes payable Federal Income tax.			\$36,759.32 10,000.00 3,250.00 1,130.90	\$51,140.22
Net Worth: Capital stock— 6% cumulative preferred thorized and outstan shares, par value \$100.0 No-par common stock, 10 at a declared value of \$6	ding, 500 0 ,000 shares	\$50,000.00	\$100.000.00	
Balance—January 1, 1945 Profit—Year ending Dec 1945 (Exhibit II)	ember 31,	\$19,579.74	27,523.03	107 *00 00
Total liabilities and n	et worth			127,523.03 \$178.663.25
				Exhibit II
R	DAIRY CO	OMPANY		DAIRW H
Statement of Profit ar		er Ending Dec	ember 31, 1	945
<u>Particula</u>	rs		$\underline{Amo}$	unt
Net Sales	• • • • • • • • • • • •			\$416,440.0\$ 272,527.30
Gross profit				\$143,912.78
Selling and Administrative Exp Drivers' wages	ipment, in	cluding de-	63,695.51 19.236.10 15.341.99 33.340.00	

Other administrative expenses, including depreciation and interest	3,224.99	1	34,838.59
Net profit, before taxes Federal Income Tax		\$	9,074.19 1,130.90
Net profit (Exhibit II)		_	7,943.29

### Exhibit III

### R DAIRY COMPANY

Cost of Sales, Year Ending December	r 31 <b>, 1</b> 945	
Particulars	Ame	$\overline{\text{ount}}$
Inventory—January 1, 1945		
Totals		\$168,738.25
Dairy Expenses: Dairy labor Dairy supplies, including cases, cans and bottles Rent Other dairy expenses, including insurance and de-	\$ 56,406.57 19,520.59 8,400.00	
preciation	19,461.89	103,789.05
Total cost of sales	· ———	\$272,527.30

The following facts were also discovered by you:

(1) Mr. Hemingway has kept no books for the 8 months he had charge of the business.

(2) Cash receipts from January 2 to January 5, 1946, were entered in the 1945 records and include the following:

Accounts receivable	\$24,361.18
Cash sales	666.06
Total	\$25,027,24

(3) Checks dated in 1946, totaling \$14,391.05, were issued and entered on the books in 1945, and the following accounts were charged:

Accounts payable	\$11,000.05
Dairy supplies	3,391.00
Total	\$14,391.05

(4) Included in accounts receivable at December 31, 1945, were uncollectible accounts against former employees totaling \$19,624.85. Collectible accounts of employees at December 31, 1945, totaled \$1,611.12, and at August 31, 1946, \$2,461.29.

- (5) The sales journal contained false entries made in 1945 overstating sales and accounts receivable by \$11,442.92.
- (6) Analysis of the inventories at December 31, 1945, and at August 31, 1946, shows the following:

	December	r 31, 1945	August 31, 1946
Particulars	Per Books	Actual	Actual
Merchandise		\$19,773.76 7,652.76	\$14.304.99 6,331.56
Totals	\$49,002.20	\$27,426.52	\$20,636.55

(7) Cash receipts from January 1, 1946, to August 31, 1946, were:

Bank loan, less interest	\$ 29,550.00
Employees' accounts	4,565.03
Customers' accounts collected	208,000.03
Collected from insurance company	16,250.00
Cash sales.	26,105.00
Total, including \$25,027.24 recorded in 1945	\$284,470.06

The obligation to the bank is a 90-day loan due September 15, 1946, and bears interest at the rate of 6 per cent.

(8) Cash disbursements from January 1, 1946, to August 31, 1946, were:

Notes payable	\$ 8.785.00
Accounts payable, including 1945 liabilities of	
\$7,093.75 which were not on books	135,510.88
Federal income tax	1,130.90
Merchandise purchased	3.435.90
Dairy labor	24,567.60
Dairy supplies	2,131.70
Rent	5,600.00
Other dairy expenses	3.834.10
Drivers' wages	32,546.17
Other selling expenses	2,492.90
Maintenance, delivery equipment	7,986.54
Employees' accounts	5,415.20
Officers' and general salaries	13,197.31
Receivers' fee	5,000.00
Total, not including postdated checks of	
\$14,391.05	\$251,634,20

The 1945 liabilities of \$7,093.75 were entirely for merchandise.

(9) Sales on account from January 1, 1946, to August 31, 1946, were \$202,143.57.

(10) Purchases on account from January 1, 1946, to August

31, 1946, were:

Particulars	Amount
Merchandise, not including \$7,093.75 unrecorded purchases at December 31, 1945  Dairy supplies  Other dairy expenses  Other selling expenses  Other administrative expenses	2,512.13 5,112.90 1,884.16
Total	\$120,653.16

(11) New equipment, scheduled below, was purchased on June 30, 1946. Six per cent notes were issued, the interest on which was paid to August 31, 1946, and included in other administrative expenses.

Particulars	Amount
Cost of new machinery purchased	
Notes payable	\$25,250.00

The book value at December 31, 1945, of the equipment traded in was as follows:

Particulars	Amount
Cost	
Book value	\$ 3,522.63

## (12) Depreciation rates in effect are:

Machinery	10%
Automobiles	25
Horses and wagons	$16\frac{2}{3}$
Furniture and fixtures	10

Depreciation on machinery purchased July 1, 1946, should be charged for 2 months only.

(13) Mr. Hemingway discovered that the general manager, in collusion with the bookkeeper, had padded the payrolls in 1945, thereby withdrawing funds amounting to \$16,250.00

which were collected in full from the insurance company in 1946.

The expense accounts overstated were:

Account	Amount
Dairy labor	\$10.125.00
Drivers' wages.	6.125.00
Total	\$16,250.00

(14) Uncollectible accounts receivable at August 31, 1946, were:

Particulars	Amount
1945 accounts	
Total	\$13.645.78

It is estimated that \$2,632.67 will be sufficient to absorb all other bad debt losses. No bad debts were written off in 1945.

(15) The income-tax liability at December 31, 1945, was computed thus:

Particulars	Amount
Profit per books	\$9.074.19
Nondeductible expense	350.00
Taxable income	\$9,424.19
Tax at 12%	\$1.130.90

(16) The correct prepaid insurance and prepaid rent at December 31, 1945, and August 31, 1946, were:

Particulars	December 31, 1945	August 31, 1946
Unexpired insurance		\$2,495.79 700.00

# (17) Goodwill was computed as follows:

Particulars	Amount
10.000 shares no-par common stock stated value of \$5.00.	
Actual cash received.	
Charged to goodwill	\$29,703.10

# PROBLEM 38 STATEMENT OF INVESTMENT BANKERS

Adam East & Company, a firm of investment bankers, authorizes you to audit its books and prepare a certified balance sheet, at December 31, 1946. Following is the postclosing trial balance:

Particulars	Dr.	Cr.
Cash in bank	\$ 42,116.00	
Due from selling participants	392.000.00	
Syndicate participation		
Cash advances	25,000.00	
Marketable securities	222,100.00	
Customers' accounts	53,416.50	
Note payable—Bank		\$100,000.00
Due to J. R. Smithson Company		475,000.00
Adam East, capital		152,816.10
George Kay, capital		65.220.05
Hugo Hamilton, capital		41.854.15
Reserve for contingencies		50,000.00
Net profit—1946		62,342,20
Totals	\$950,232,50	\$950,232.50

In an analysis of the accounts, you note the following points: "Syndicate participation" is the balance of the underwriting of an issue of \$1,000,000.00 6 per cent equipment trust bonds of the J. R. Smithson Company. Details supporting this account are:

Particulars	$\underline{\mathbf{Dr.}}$	Particulars	Cr.
Contract price of bond issue	\$ 950,000	Due from selling participants	\$ 784,000
Repurchases, at 98, to sup- port market Listing, legal and auditing	196,000	Sales of bonds retained (face value \$100,000) Sales of bonds repurchased	99,000
expenses	12,000	at 99	59,400 215,600
Total	\$1.158.000	Total	\$1,158,000

Upon examining the contracts pertaining to this issue, you find that Adam East & Company has contracted for the above issue at 95, and has sold \$\$00,000.00 of the issue to selling participants at 97 (one-half to be paid down, balance in 60 days), retaining bonds totaling \$200,000.00 for its own use and thereby becoming a selling participant. Contracts with participants provide that sales to customers must be at a figure

no lower than 99, and that Adam East & Company is obligated to maintain the market at 99 for sixty days after the contract date, November 18, 1946, by purchase, when necessary, on the open market. Profit or loss on resale of such securities is to be spread prorata among all selling participants. It is further provided that each selling participant, as identified by certificate numbers, who originally sold the bonds which are later repurchased by Adam East & Company, shall, as a penalty, forfeit his two-point profit on the bonds so repurchased, which profit shall be shared prorata with the remaining selling participants. The one point above the contract price of 97, which has been charged to selling participants, is to cover the penalty that may be assessed. Of the bonds repurchased, \$20,000.00 had been sold originally by Adam East & Company, and were a part of the \$60,000.00 that had been resold. At the close of the 60-day period, the deposit of each participant is to be refunded after deductions have been made for penalties assessed against him.

Cash advances represent two items:

Advance to Burton Hunter & Company  Advance to George Kay	
Total	\$25,000.00

The advance to Burton Hunter & Company is a call on one-fourth interest in a syndicate formed December 15, 1946, to purchase at 60 all the new issue of common stock of the Jones-Smith Company not subscribed by the stockholders of the Jones-Smith Company. The stockholders have from December 15, 1946, to January 15, 1947, to purchase the issue of 50,000 shares, and it is found that at December 31 the market value had dropped to 59, and only 12,000 shares had been purchased by the stockholders. The advance to George Kay is for estimated traveling and entertaining expenses to secure the American participation in a proposed loan to a foreign government.

Marketable securities, which represent temporary investments of cash, are stated at cost, the market value at December 31, 1946, being \$193,425.00. Mr. East asks you to value these securities at an arbitrary figure above the market value. He suggests that either cost, or a figure halfway between face

value and market value, be used and points to an editorial in a recent business magazine as his authority. You find that these securities are railroad bonds with a face value of \$240,-000.00, on which 6 per cent interest has been paid regularly; the earnings of the railroad have always exceeded interest requirements.

Customers' accounts are balances due on sales for other than syndicate accounts.

There are two notes payable: one to banks for \$100,000.00, and a second to J. R. Smithson Company for \$475,000.00, both unsecured, due January 12, 1947, and January 18, 1947, respectively.

The partners share profits and losses in the following ratios: Adam East 45 per cent, George Kay 35 per cent, and Hugo Hamilton 20 per cent. Mr. Hamilton has recently been sued for payment of a mortgage which will not be covered by his personal assets. The deficiency is estimated at \$10,000.00.

Withdrawals by partners during 1946 were:

Adam East	\$14,982.11
George Kay	6,784.18
Hugo Hamilton	8,200.50

A reserve for contingencies was established in 1946 to provide for unpaid expenses arising from past syndicate promotions, and was charged against partners' accounts in the same proportion as other losses are shared.

You find that accrued interest of \$60,000.00 at December 31, 1946, on a syndicate bond issue (of Orchard Manufacturing Company) promotion of 1944, on which Adam East & Company had guaranteed the interest payments for 5 years, probably will not be paid at February 15, 1947, the due date.

Make whatever adjustments you consider necessary and prepare a balance sheet with an accompanying certificate, your work having been completed January 9, 1947. No interest on securities owned need be accrued.

### PROBLEM 39

## STATEMENTS OF REAL ESTATE CORPORATION

From the following information prepare a working trial balance, with explanations of any adjustments you may make thereon, which correctly reflects the balance-sheet accounts at December 31, 1946, and the income earned by the Watson Real Estate Corporation during the 10 months ending on that date.

The corporation was organized on March 1, 1946, with a capitalization of \$100,000.00, which was paid in cash.

The general ledger trial balance at December 31, 1946, arranged to show total debits and credits to each account, was as follows:

<u>Particulars</u>	Dr.	<u>Cr.</u>
Cash in bank	\$ 189,228.55	\$ 144,454.86
Accounts receivable—Land sales	750,463.00	201,718.82
Notes receivable	23,000.00	11,000.00
Investments, acquired by cash purchases	50,000.00	•
Accrued interest on investments	1,487.50	
Unsold land	613,280.00	375,231.50
Trustee's cash	130,800.67	130,800.67
Due from trustee	26,439.97	25,150.05
Furniture and fixtures	10.000.00	
Contracts payable—Land	101,730.97	613,280.00
Accounts payable, for expenses		1,603.15
Unrealized profits	94,859.41	375,231.50
Capital common stock, 100 shares, par		
value \$100.00		100,000.00
Interest earned—Investments		2,275.00
Interest earned—Trust accounts		4,372.85
Officers' selaries	20,800.00	
Office salaries	3.826.00	
Office expenses	4,128.32	
Trustee expenses	2,629.73	
Taxes paid on unsold lots	629.80	
Commission realized from land sales	1 222 22	94,859.41
Dividends paid	1,200.00	
Salesmen's commissions	48,741.23	4.080.04
Accrued Federal taxes	* 070 04	1,370.34
Federal income tax	1,370.34	
Organization expenses	6,732.66	
Totals	\$2,081,348.15	\$2,081,348.15

Agreements, entered into during 1946, with owners of numerous lots in various subdivision projects, all provide in brief that:

1. The Watson Real Estate Sales Corporation, as agent, is given an exclusive option covering a period of 2 years from the date of the agreement to sell the lots at specified prices on a commission basis of 50 per cent of the selling price, such rate of commission to be applied on each item of cash or notes received (and to be earned only upon such receipt) from lot pur-

chasers; the commission is to be increased or decreased by onehalf of any income received or expense paid by the trustee. The agent has no liability under the contract except to put forth his best efforts to sell the lots.

- 2. A trustee (The Hatter Trust Company) is to be appointed to take title to the lots; to collect installments on all sales contracts secured by the agent; to destribute the net proceeds between the original owners and their agent. The Watson Real Estate Sales Corporation; and to convey title to individual lot purchasers when the purchase price has been paid in full.
- 3. All taxes and special assessments are chargeable against either the original owners or, if the lots are sold, to individual purchasers.

Following is a summary of the Trustee's reports, which have been audited and found to be in agreement with the above provisions:

### Cosh Account

Receipts:		
Collected on installment sales contracts	\$126,427,52	
Interest on above		\$130,500,67
•		•
Disbursements:		
Paid to original owners of real estate	\$ \$6,418.82	
Paid to Watson Real Estate Corporation.		
Trust expenses paid.		114,198.60
Balance, 12/31/45		\$ 16,602.07

The balance of \$16,602.07 represents the collections of December, 1946, which were disbursed in January, 1947, as follows:

To original owners of properties	\$ 15,312.15 1,289.92
Total	\$ 16.602.07

Below is a computation of profit reported as realized on collections:

Collections by Trustee, from sales contracts.	\$126,427,52
Collections by company, retained by permis-	
sion of trustee, as commissions:	
Down payments collected at time individ-	
ual lot sales were made	52,291.00

From notes receivable of \$23,000.00 accepted as down payment in lieu of cash.	11,000.00
Total cash collected	\$189,718.82
Commission realized from collection of installment sales contracts	\$ 94,859.41

Depreciation on furniture and fixtures for the 10 months' period should be computed at the rate of 10 per cent per annum.

The corrected Federal income-tax liability is \$3,081.25.

### PROBLEM 40

### Analysis of Financial Statements

The following letter and two financial statements have been submitted to your client, who contemplates investing \$100,000.00 in the T Corporation. Your client turns the letter and the exhibits over to you, requesting that you give your opinion of the company's financial position and of the advisability of making the investment suggested. Write a letter to Mr. Blank. If you think the situation justifies it, state what further information Mr. Blank should request from the company.

### T CORPORATION

Builders—General Contractors 135 Reed Avenue

May 19, 1946

Mr. George L. Blank, City.

Dear George:

Complying with the request you made during our recent conversation, I am forwarding herewith statements prepared by our bookkeeper on April 30. As you will notice, we are now in pretty good shape, aside from the need of ready cash. We have built up a substantial surplus during our corporate life of 11 years, and we are realizing a net profit of over 10 per cent on our recent contracts. Furthermore, while we have secured no contracts not now in process, we have excellent prospects of securing several very large contracts around the first of June that will keep our organization busy throughout the remainder of 1946. By the close of this year, we hope that at last we shall be on a dividend-paying basis.

As the balance sheet indicates, our common shares now have a book value of over \$103.00 each. However, rather than obligate ourselves to the banks for further short-term loans, our shareholders have agreed that we should sacrifice some of our present equity in order to obtain permanent capital and thus take care of our immediate necessities and provide for normal expansion.

We therefore offer to sell you 2,000 shares of our no-par common stock at

\$50.00 per share. We believe this offer will appeal to you as a first-class investment and will give us working capital that will insure our future growth and success.

success. Y	ours very trul		
SILAS R. MANN, President.			
T CORPO	DRATION		Exhibit I
Balance Sheet-	-April 30, 194	16	
Ass	ets		
Cash			\$ 1,748.62
Receivables: Completed jobs Jobs in process Less—Costs to be incurred on uncom-	•	\$ 45,814.70	
pleted jobs	352,017.60	293,655.52	339,470.22
Inventories, materials and supplies:			
In stockroom		\$ 18,241.37 55,608.26	73,849.63
Bonds and mortgages accepted in se	ettlement of		
debtors' accounts			33,000.00 167,312.33 3,391.68
Insurance, licenses, and office supplies Engineering work on prospective jobs. Overhead, to be absorbed by jobs in p		\$ 973.50 3,361.72 45,305.86	49,641.08
Goodwill			100,000.00
Total assets		• • • • • • • • • • • • •	\$768,413.56
Liabi	lities		
Bank loans.  Accounts payable, including unpaid involved taxes.  Accrued taxes.  First mortgage on real estate.  7% cumulative preferred stock, \$100.00 No-par common stock, 2,000 shares outs Surplus.  Total liabilities.	partanding		\$ 45,000.00 357,900.79 2,519.72 5,215.16 3,800.00 47,250.00 100,000.00 106,727.89 \$768,413.56
T CORPO	RATION		Exhibit II
Statement of Profit	on Jobs in Pr	rocess	
	30, 1946	A	4
Particulars Tatal contract prices		Amor	шь
Total contract prices		1,070,269.48	
Cash to be received			\$645,673.12

Disbursements to be made:	
Unpaid invoices applicable to jobs	S
Labor necessary to complete (estimated)	
Materials to be purchased (engineer's estimate)	
Overhead (10% of prime costs to be incurred)	
The state of the board is a state to a second	_
Estimated net profit to be realized on jobs in process.	
Percentage of net contract prices	

# PROBLEM 41 Consolidated Work Sheet

From the following information, prepare a consolidated worksheet of the Ames Mfg. Co. and its subsidiaries at December 31, 1946:

	Ames	Stuart-Jones	Baher
Assets	Mfg. Co.	Company	Motor Co.
Cash	\$ 326,126.17	\$ 101,692.20	\$ 13,322.16
Inventories	533,826.33	412,312.71	102,224.24
Other current assets	553,863.50	373,115.41	108,575.91
Investments: Stuart-Jones Co	960,000.00	•	289,062.50
Investment: Baher Motor Co	400,000.00		•
Securities, at cost	100,000.00		69,000.00
Plant and equipment less accrued	•		•
depreciation	3,196,498.20	1,868,987.06	465,470.70
Total assets	86,070,314.20	\$2,756,107.38	\$1,047,655.51
Liabilities and Net Worth			
Accounts payable and accrued ex-			
penses	\$ 540,281.10	\$ 267,161.36	\$ 122,322.38
Collateral trust 6% bonds due July			
1, 1955	500,000.00		
First-mortgage 6% bonds	1,000,000.00	500,000.00	200,000.00
6% preferred stock, par \$100.00	1,000,000.00		200,000.00
Common stock, no par		1,204,816.00	
Common stock, par \$100.00	1,836,400.00	•	400,000.00
Surplus, January 1, 1946	603,000.00	557,313.50	146,718.23
Profits—Year ending Dec. 31, 1946	590,633.10	226,816.52	21,385.10*
Total liabilities and net worth	\$6,070,314.20	\$2,756,107.38	\$1,047,655.51
* Red.			

The Ames Mfg. Co. investments were made up of stocks in the following companies:

C		α
STU!	rt-Jones	Co.:

Date Purchased	Class of Stock	Shares	Cost
June 30, 1945		57,750 10,500	\$\$00,000.00 160,000.00
Totals	• • • • • • • • • • • • • • • • • • • •	68,250	\$960,000.00

BAHER MOTOR Co.:			
Date Purchased	Class of Stock	Shares	$\underline{\mathbf{Cost}}$
January 1, 1938	Preferred, par \$100.00	1,000	\$ 85,000.00
January 1, 1939	Common, par \$100.00	3,800	315,000.00
Total			\$400,000.00

The preferred stock of the Baher Motor Co. is 6 per cent cumulative and nonvoting. Dividends on this preferred stock were in arrears from January 1, 1937, until December 31, 1942, when they were paid in full; all subsequent annual preferred dividends have been paid at the end of each calendar year.

The Baher Motor Company investment in the Stuart-Jones Company comprised the following:

Date Purchased	Class of Stock	Shares	Cost
January 1, 1941		13,125 13,125	\$125,000.00 164,062.50*
Total		<del></del>	\$289,062.50

<sup>\*</sup> Represents a 100% stock dividend which was capitalized at \$12.50 a share and taken up as income. An entry was made at December 31, 1944, on the books of the Stuart-Jones Company transferring \$656,250.00 from earned surplus to capital stock.

The net worth of the Stuart-Jones Company at the dates the Ames Mfg. Co. and the Baher Motor Co. acquired its stock was:

	January	June	May
<u>Particulars</u>	<u>1, 1941</u>	30, 1945	8, 1946
Shares outstanding	52,500	105,000	105,000
Capital stock account Surplus		\$1,204,816.00 690,859.90	\$1,204,816.00 736,929.70
Total net worth	\$589,962.00	<u>\$1,895,675.90</u>	\$1,941,745.70

The net worth of the Baher Motor Co. at January 1, 1938, and January 1, 1939, was:

Particulars	January 1, 1938	January 1, 1939
Preferred stock	. \$200,000.00	\$200,000.00
Common stock	. 400,000.00	400,000.00
Surplus	. 76,918.33*	64,360.00*
Total	. \$523,081.67	\$535,640.00

<sup>\*</sup> Red.

No subsidiary profits have been taken up on the Ames Mfg. Co. books except in the form of dividends.

The inventories of the Ames Mfg. Co. at December 31, 1946, included purchases in 1946 from the Stuart-Jones Company, on which the latter company made a gross profit of \$61,326.19; similar purchases from the Baher Motor Co. were also included in the inventory, the gross profit to the Baher Motor Co. being \$26,382.44.

On March 6, 1946, the Ames Mfg. Co. sold certain securities to the Stuart-Jones Company for \$75,000.00, the profit realized by the Ames Mfg. Co. on this transaction being \$12,000.00. On December 5, 1946, the same securities were purchased by the Baher Motor Co. for \$69,000.00. The purchase price at both dates was in accordance with the market values then existing.

Intercompany accounts, included in other current assets and accounts payable, at December 31, 1946, were:

Owing by	Amount
Ames Mfg. Co.	\$149,382.12
Ames Mfg. Co.	26,444.51
Baher Motor Co.	15,000.00
	Ames Mfg. Co. Ames Mfg. Co.

### PROBLEM 42

### APPLICATION OF FUNDS

From the following information, prepare a statement showing the sources from which funds were derived and the manner in which they were disposed of during the year 1946:

# MONO PRINTING COMPANY Trial Balances—December 31, 1945 and 1946

	December 31	
Account	1945	1946
Cash in bank		\$ 17,344.40
Cash on hand	500.00	1,000.00
Sinking fund trustee	2,816.25	6,041.67
Trade receivables	307,313.09	210,786.55
Inventories	115,504.53	78,555.18
Prepaid insurance and supplies	6,205.99	4,327.14
Notes receivable from officers	26,252.49	19,711.42
Cash surrender value of life-insurance policies	13,417.52	10,815.30
Deferred bond expense	3,995.51	2,904.69
Land, buildings, machinery, and fixtures	723,330.06	733,683.83
Investments	51,269.70	66,420.37
Total debits	\$1,260,875.22	\$1,151,590.55

Trade payables	\$ 51,623.87 39,267,40	\$	42,098.32 28,764.81
Notes payable on purchases of machinery	65,896.02		20,102.01
Accrued interest on machinery notes	689.90		
6% first-mortgage bonds.	180,000.00		170,000.00
Accrued interest on first-mortgage bonds	1,350.00		1,275.00
Reserve for bad debts	24,930.20		18,447.08
Reserves for depreciation	147,982.66		172,224.97
Common stock	600,000.00		650,000.00
Surplus	149,135.17		68,780.37
Total credits	\$1,260,875.22	\$1,	151,590.55

The value of land, buildings, machinery, and fixtures was increased by purchases of new equipment totaling \$25,149.08; at the same time, old equipment costing \$14,795.31, upon which there was accrued depreciation of \$10,040.69, was sold for \$2,575.00. Depreciation charged to expense during 1946 amounted to \$34,283.00.

Following is an analysis of investments:

Kind	Acquired	Cost	Selling &	On Hand at December 31, 1946
500 shares Center Paper Co.	•			
stock (14 of total capitaliza-	-			
tion)	4/3/43	\$50,000.00		\$50,000.00
Public utility bonds	11/20/45	1,269.70	\$ 1,275.00	-
Public utility bonds	6/10/46	10,425.00	10,650.00	
Public utility bonds	9/22/46	5,000.00	5,050.00	
Public utility bonds	12/25/46	16, 120.37	-	16,420.37
Totals		\$\$3,115.07	\$16,975.00	\$66,420.37

Bonds represented a temporary investment of surplus cash. Of the machinery notes unpaid on December 31, 1945, \$37-902.40 were due in 1947 and subsequent years; all machinery notes were liquidated by the payment of \$50,000.00 in capital stock and the balance in cash.

Mortgage bonds totaling \$25,000.00 mature on May 15, 1947, and a similar amount on November 15, 1947.

Following is an analysis of the sinking fund trustee account:

Cash:	
Balance, January 1, 1946 \$ 2,816.25	
Receipts:	
Cash deposited for payment of principal and interest. 23,933.34	
Proceeds from sale of securities. 17,325.00	
Interest received	\$44,697.61

Disbursements:			
Purchase of securities		\$22,200,00	}
Accrued interest purchased		224,00	
Bonds redeemed		10.000.00	•
Bond interest paid		. 10.650.00	
Trustee's fees and expenses		405.95	
Balance, December 31, 1946		•	\$ 1.216.67
			On Hand
Securities:		Selling :	at December
Kind	<u>Cost</u>	Price	31, 1946
Real estate bonds	8 7,500,00	\$ 7.500.00	
Railroad bonds	9.875.00	9.825.00	
Utility bonds	4.825.00	t,c=5.00	\$4.825.00
Totals	\$22,200,00	\$17.325.00	\$4,825.00
Total cash and securities	<del></del>		\$6.041.67

Prepaid expenses are to be treated as current assets.

The reduction of officers' notes receivable represents the payment of the note of a retiring officer.

Cash surrender value of life-insurance policies was increased by \$7,397.78 and decreased by a loan on the policies of \$10,000.00.

Deferred bond expense was decreased by the annual writeoff provided for in an amortization schedule.

Operating losses for 1946 amounted to \$80.354.80, after deducting a refund received on 1944 Federal income tax of \$4,157.20 and accrued interest thereon of \$244.23.

# PROBLEM 43 GROSS PROFIT RATIO

The AB Machinery Company produces a certain specialty which sells for \$250.00. Anticipating an increase of 10 per cent in labor costs and an increase of 5 per cent in the cost of raw materials, the management asks you to determine what selling price must be established to produce the same percentage of gross profit as that realized heretofore.

The only figures thus far made available to you are the following:

The current ratio of material costs to cost of sales is 43 per cent: labor costs are 36 per cent, and burden 21 per cent. You are informed that the increased costs which are anticipated

would effect a decrease of 23 per cent in the amount of present gross profits if the present selling price were maintained.

Prepare a brief statement of profit and loss per unit showing the desired new selling price and the new costs per unit.

### PROBLEM 44

### RESTATEMENT OF BALANCE SHEET

You are requested to recast the following balance sheet in such a manner that all the facts will be properly and effectively portrayed. You may use the figures given in the balance sheet and in the data following in any way you may see fit, but no adjustments to the figures themselves are required.

## M. N. X. RESTAURANT SUPPLY COMPANY Balance Sheet-March 31, 1947

Assets

Current Assets:					
Cash on hand and in banks	\$ 26,418.32				
Accounts receivable, net	195,024.18				
Notes receivable and accrued interest	14,296.80				
Inventories:	·				
Finished goods					
Raw materials					
Work in process					
Factory supplies 674.76	151,515.77				
TY	244.00				
Unexpired insurance premiums	344.29				
Prepaid interest on bank loans	200.00	6007 700 00			
Unamortized bond discount	9,702.67	\$397,502.03			
Goodwill					
Fixed Assets:					
Land	\$ 50,000,00				
Buildings	94,793.33				
Furniture and fixtures.	5,631.36				
Automobiles	4,306.66				
Machinery	76,135.25	•			
Total.					
Reserve for depreciation	82,131.23	148,735.37			
Total assets		\$546,238.40			
		<u> </u>			
Liabilities and Net Worth					
Current Liabilities:					
Accounts payable	\$ 99.111.11				
Bank loans	40,000.00				
Accrued wages	1,125.03	\$140,236.14			
	•				

First-Mortgage Bonds	100,000.00
Preferred stock\$100,000.00	
Common stock	150,000.00
Surplus	156.002.26
Total liabilities and net worth	<u>\$546,238,40</u>
The following information is to be considered: (a) The cash account is composed of:	
Petty cash funds §	1 000 00
	24.986.52
Overdrait in payroll bank account	68.20*
Deposits with telephone and electric light companies.	500.00
Total	26,418.32
(b) Accounts receivable consist of:	
Trade accounts \$2	06.510.11
Employees' accounts, current.	6.428.12
	17.914.05*
Χe <del>t</del> ξ <u>1</u>	95,024.18
* Red.	
(c) Analysis of trade notes receivable:	
Past-due notes	3.000.00
Notes not yet due	11.078.00
Accrued interest	218.80

All notes are considered collectible.

(d) Inventories are priced at the lower of cost or market except for the supplies, which are priced at cost.

Total...... \$ 14.296.50

- (e) Goodwill was originally set up at \$50,000.00 and represented the stated value of 5,000 shares of no-par-value common stock given to present officers on April 1, 1940, for their services in organizing the company. The account was written down to \$1.00 in 1945.
- (f) The fixed assets are at their appraised values, which is compared with cost in the following summary:

	İssaL		Depreciation	n Reserve
<u>Asset</u>	Cost	Appraisal	Per Books	Appraisal
Land	0.000.01	\$ 50,000,00		
Building	90,739,99	94,793,33	\$23,629.60	\$22,543.50

Furniture and fixtures Automobiles Machinery	4,306.66	5,631.36 4,306.66 76,135.25	3,930.36 2,110.19 49,390.29	3,930.36 2,110.19 53,246.88
Totals	\$179,014.27	\$230,866.60	\$79,060.44	\$82,131.23

The appreciation was credited to surplus on March 31, 1947, the date of the appraisal by the General Appraisal Company.

- (g) First mortgage bonds of \$100,000.00 bear 6 per cent interest which has been paid to March 31, 1947. The bonds mature in annual installments of \$10,000.00 until March 31, 1953, when the balance of \$50,000.00 becomes due.
- (h) The preferred stock is 6 per cent cumulative stock and consists of 1,000 shares having a par value of \$100.00. No preferred dividends were voted during the year ending March 31, 1947, although preferred stockholders have regularly received their dividends to March 31, 1946. The preferred stock was sold at date of incorporation at a premium of \$5,000.00 which was credited to surplus.
  - (i) Analysis of the surplus account follows:

Particulars	<u>Dr.</u>	Cr.
Premium on sale of preferred stock	\$ 49,999.00 36,000.00 18,000.00	\$ 5,000.00 48,781.54
31, 1947, of \$9,654.29		206,219.72
TotalsBalance, March 31, 1947	\$103,999.00 156,002.26	\$260,001.26
Totals	\$260,001.26	\$260,001.26

- (j) The company is contingently liable for discounted notes amounting to \$10,000.00.
- (k) Finished goods carried at an inventory value of \$59,930.36 are in public warehouses, and the warehouse receipts have been assigned to the bank as security for the loan of \$40,000.00.

### PROBLEM 45

# JOURNAL ENTRIES FOR MERGER

On July 15, 1945, the Collins Company acquired the entire capital stock, consisting of 250 shares, par value \$100.00, of the

Stewart Corporation, and in exchange canceled an obligation of the Stewart Corporation to the Collins Company amounting to \$56,147.03. The net worth of the Stewart Corporation at the date of acquisition was \$39,703.65.

The subsidiary company was used as a distributor of the parent company's product, but heavy losses during the following 18 months made advisable the dissolution of the subsidiary company. The dissolution was completed on December 31, 1946.

From the following information, you are to prepare journal entries to be placed on the books of the Collins Company which will record properly the effect of the liquidation of the Stewart Corporation on the Collins Company's accounts. You are also required to determine the income or loss arising from the liquidation and sale, if any, for Federal income-tax purposes, to:

- (a) The Stewart Corporation
- (b) The Collins Company

Separate Federal income-tax returns will be filed for each company.

On December 31, 1946, the Illinois Sales Company was incorporated with the following capitalization:

Kind of Stock	Shares	Par Value	Tetal
6% cumulative preferred stock	1.599	\$100.00	\$150,000,00
Common stock	<u> 500</u>	none	

The stock of the Illinois Sales Company had no market value at December 31, 1946.

It was agreed that the new company would purchase all of certain assets formerly owned by the Stewart Corporation, including a franchise giving them an exclusive State agency for the Collins Company, and assume certain liabilities: and that any Stewart assets remaining in the hands of the Collins Company would be regarded as worthless.

Following is a trial balance of the accounts of the Stewart Corporation and also the valuations at which the new organization agreed to accept certain items:

Assets	Per Books	Price to Illinois Sales Company
Cash	\$ 636.57	
Accounts receivable, net	18,925.SI	\$ 15,000.00

Inventories. Fixtures, net. Automobiles, net. Unexpired insurance. Prepaid advertising. Goodwill. Franchise.	16,814.70 9,703.66 2,036.92 440.28 1,147.14 5,000.00		20,406.81 7,500.00 2,000.00 440.28 55,685.93
Totals	54,704.88	\$1	01,033.02
Accounts payable.  Bank loans.  Accrued expenses.  Due Collins Company.  Capital stock.  Surplus.	\$16,407.89 5,000.00 1,033.02 28,630.63 25,000.00 21,366.66*	\$	1,033.02
Totals	\$54,704.88	\$	1,033.02

<sup>\*</sup> Red.

The consideration received by the Collins Company for the net assets of \$100,000.00 sold to the Illinois Sales Company was 1,000 shares of the preferred stock of the latter company.

The inventory of \$16,814.70 represented purchases during 1946 from the Collins Company at factory cost plus 10 per cent. The inventory valuation of \$20,406.81 is the billing price to outside distributors.

The only change in the surplus account of the Stewart Corporation since July 15, 1945, was due to operating losses of \$36,070.31. The investment account on the books of the Collins Company at December 31, 1946, was composed of:

Original investment	\$56,147.03 28,630.63
Total	\$84,777.66

# PROBLEM 46

# TAX AND BONUS FRACTION

A tax of  $2\frac{1}{2}$  per cent is levied by the State of X on all corporate income; in computing income subject to tax, all expenses, including Federal income tax at 40 per cent (but not the State income tax), are deductible. Each year the M Company, which has its home office in the State, distributes to its general officers as a regular part of their compensation a bonus

equal in total to 10 per cent of the corporate net profit after all deductions, including income taxes and bonus, have been made. The annual net profit averages \$100,000.00.

Monthly reports of profit and loss are prepared for the officers of the *M* Company by its comptroller. Furnish him with the necessary decimal fraction, correct to the fifth place, which may be applied to each month's net profit (before deducting income taxes and bonus) in order that the income taxes and bonus may be properly accrued.

# PROBLEM 47 Build-up of Accounts

In 1945, Carl Swanson and George Smith entered into a realestate venture; from the following information you are required to prepare a balance sheet. on the accrual basis, of the venture accounts at December 31, 1946, and a statement of profit and loss for the 18 months ending on that date. All profits and losses derived from each piece of property are to be distributed equally to all parties having a financial interest therein; carrying charges are to be capitalized. The net worth section of the balance sheet should show the original contributions and any other information you deem of interest to the partners. Cash transactions of all parties were handled through their personal bank accounts.

A chronological summary of the various transactions follows:

July 1, 1945—An agreement covering the purchase of a piece of real estate contained the following items:

Particulars	Dr. Buyer	Dr. Seller
Sales price	\$3\$0,000.00	
Two 6% purchase-money morigages due June 30, 1946.	•	\$200,000.00
Accrued taxes, January 1, 1945, to June 30, 1945		7,516.84
Cash, contributed equally by Smith and Swanson		172,483.16
Totals	\$380.000.00	\$3\$0.000.00

July 1, 1945—Smith paid brokerage fees of \$10,400.00 on the above purchase.

The real estate was at once split up into the following properties, the market values shown being put thereon by reliable appraisers:

Property	Market Value July 1, 1945
	\$100.000.00
_	50,000.00
C	250,000.00
Total	\$400.000.00

The two purchase-money mortages covered the following:

Property	Amount
₫B	\$100,000.00
C	100,000.00
Total	\$200.000.00

January 1, 1946—Smith paid 6 months' interest of \$6,000.00 on the two purchase-money mortgages.

January 1, 1946—Swanson sold his interest in AB to Fred Morand for \$110,000.00 cash; Morand agreed to assume all Swanson's liabilities for unpaid taxes on AB.

February 18, 1946—Property B was sold, and the following sales contract is in evidence:

Particulars	Dr. Buyer	Dr. Seller
Sales price.	0.000.092	
6° purchase-money mortgage due February 18, 1951	•	\$45,000.00
6° first-mortgage bonds of the Dale Co., due April 15,		-
1953		20,000.00
Accrued interest on Dale Co. bonds, October 15, 1945,		
to February 18, 1946		440.00
Accrued taxes. January 1, 1946. to February 18, 1946		298.30
Cash, received by holder of first mortgage on AB		\$3,261.70
Totals	\$99,000.00	60.000.003
February 18, 1946—The mortgage on follows:	AB was	paid as

$6C_{\mathcal{C}}$ first mortgage on A. due February 18, 1956 Proceeds from sale of B.	\$ 75.000.00 33.261.70	\$108,261.70
Mortgage on AB paid. 3°C brokerage iess on \$75.000.00 mortgage on A	2,250.00	
Accrued interest, January 1, 1946, to February 18, 1946	\$00.00	103.050.00
Net proceeds distributed equally to Smith and I	Morand	\$ 5.211.70

March 18, 1946—Real estate taxes for 1945 paid by Smith were:

١

$A \dots$		 	. <b></b> .	 :	\$ 3,758.41
$B\dots$		 		 	1,879.22
<i>C</i>		 		 	9,396.05
	Total	 		 ••••	\$15,033.68

April 15, 1946—Interest collected by Smith on Dale Co. bonds \$600.00.

June 15, 1946—An apartment building on property C, construction of which started March 1, 1946, was completed. A construction loan of \$400,000.00 in the form of 20-year 6 per cent first-mortgage bonds was negotiated on March 1, 1946; the distribution of the proceeds of this loan and of additional construction costs paid by Smith and Swanson was:

Receipts:

December 31, 1946—Results from the operation of the apartment building from June 15, 1946, to December 31, 1946, were as follows:

Rentals collected	
Net proceeds received by Smith	\$10,883.16

There were no prepaid or accrued expenses at December 31, 1946, other than interest and taxes; 1946 tax assessments were:

Property	Amount
A	\$ 3,618.75
C	19,596.22

The 1946 tax on C should be divided between land, building, and building expense in the following ratios: one-sixth, seven twenty-fourths, and thirteen twenty-fourths, respectively.

Three per cent is considered a fair depreciation rate on the apartment building.

#### PROBLEM 48

# STATEMENTS OF SCHOOL DISTRICT

The Board of Education of the Stoneboro school district has authorized you to make an audit of its books for the year ending June 30, 1945, and instructs you to prepare a balance sheet composed of 2 funds; one to be captioned "Current Fund" and to reflect items arising from operations, and a second to be known as "Building Fund" which will incorporate only those items representing capital assets. In addition to the fund balance sheet as of June 30, 1945, you are asked to prepare a condensed statement of income and expense for the year ending on that date.

Following are the trial balances of the general ledger on June 30, 1944 and 1945:

	June 30		
Account	1944	1945	
Cash on hand	\$ 300.00	\$ 300.00	
Cash in bank	1,856.29	772.48	
Cash in hands of City Treasurer	10,508.63	69,875.69	
1942 taxes receivable	201,406.61	188,711.17	
1943 taxes receivable	581,043.29	313,578.68	
1944 taxes receivable	1,972,655.12	923,675.37	
1945 taxes receivable		2,001,373.84	
State aid	65,814.76		

Inventory of supplies.  Unamortized bond discount.	12,021.54 265,711.62	12,021.54 17,275.81
Real estate	•	265,711.62 3,984,921.86
Buildings Equipment—	3,956,849.20	5,954,921.50
Departmental	563,193.61	636,598.73
Building	116,761.42	116,436.97
Instruction expense	110,101.12	1,148,483.59
Administration expense		294,726.15
Building operation and maintenance		483,964.03
		<del></del>
Totals	\$7,748,122.09	\$10,458,427.53
10101	2 12 500 00	
1942 tax anticipation warrants		0 150 500 00
1943 tax anticipation warrants	426,000.00	\$ 172,500.00
1944 tax anticipation warrants	1,300,000.00	5\$3,000.00
1945 tax anticipation warrants	1== 01= 00	1,000,000.00
Teachers' orders	175,317.32	217,725.04
Certificates of indebtedness	73,651.27	94,817.60
Accounts payable	37,849.63	162,676.52
6% refunding bonds	750,000.00	1,218,000.00
5% building bonds	947,750.00	889,000.00
Accrued interest	70,586.96	74,310.19
Reserve for depreciation	3\$2,064.93	376,779.93
Reserve for uncollectible taxes—1942	186,453.02	186,453.02
Reserve for uncollectible taxes—1943	192,006.18	192,006.18
Reserve for uncollectible taxes—1944	197,265.51	197,265.51
Reserve for uncollectible taxes—1945	16 016 97	200,137.38
Unamortized bond premiums	16,916.87	16,916.87
Income from taxes		1,801,236.46
Miscellaneous income	9.070.760.40	95,842.43
School fund	2,979,760.40	2,979,760.40
Totals	<u>\$7,748.122.09</u>	\$10,458,427.53

In line with customary procedure, 1945 taxes were levied in July, 1944, and the income therefrom will constitute the income of the school district for the year 1944–45. Inasmuch as the 1945 taxes will not be due prior to June 30, 1945, the Board issued 6 per cent anticipation warrants, as in other years, in order to provide funds with which to operate.

The balance of 1942 taxes receivable is considered uncollectible, and you are authorized to write it off against current income, applying it in the ratio of three-to-one against education and operation income, respectively.

According to State law, the levy of 1945 was required to be divided as follows:

Education	
•	
Total levy	\$2,001,373.\$4

The law provides that the portion allotted to education covers the expected requirements for instructional and administrative expenses, interest on and retirement of refunding bonds, and all purchases of departmental equipment. That part of the levy relating to operation covers the estimated expenses of operating the building, expenditures for building improvements and equipment, and interest on the prepayments of principal of building bonds.

Miscellaneous income was analyzed as follows:

Particulars	Amount
Tuition	\$46,391.82
Laboratory fees.	16.004.73
Book store receipts	23,937.83
Library fines	2,663.05
Rental of gymnasium and athletic field	6.845.00
Total	\$95,842.43

All cash received is deposited with the city treasurer against whom the Board issues orders in payment of its obligations. Bank balance represents collections of fees, rentals, and similar items, made during the month of June. which were turned over to the city treasurer on the fifth of July.

At the close of each school year, the Board submits to the State Board of Education a statement of the expenses incurred during the term for certain industrial courses, and for the care of crippled children. The State reimburses the district with an arbitrary percentage of such expenses. On July 12, 1945, the district received a check for \$69.35\$.32 from the State Board, representing the State's contribution to the expenses of the year 1944–45.

Inventories of supplies on June 30, 1944 and 1945, were as follows:

	Values at Cost June 30		
<u>Item</u>	1944	1945	
Educational supplies	\$ 6.708.15 2.059.33	\$4.156.28 1.136.13	
Operating supplies	2.059.55 3.25 <u>4</u> .06	4.372.40	
Total supplies	\$12.021.54	\$9,664.81	

During the year, building equipment, amounting to \$5,-285.00 and fully depreciated, was discarded, no salvage value being realized. The Board has stated to you that it assumes

that full provision has been made for capital expenditures in each year's levy. You may assume, therefore, that any deficiency in a levy is deductible from appropriations for current expenses.

Because of the difficulty of levying and collecting taxes, caused by the depression, refunding bonds, payable out of future levies, were authorized under a special State law for the purpose of providing funds for teachers' salaries. Refunding bonds have been issued as follows:

Date of	Issue	Rate	Maturity	Amount
November	1, 1943	6%	\$20,000.00 payable annually commencing November 1, 1944.	\$400,000.00
January	1, 1944	6%	\$10,000.00 payable annually for 5 years commencing January 1, 1945, and an- nual installments of \$20,000.00 there-	
35	1 1011	c~	after	250,000.00
May	1, 1944	070	\$2,000.00 payable annually for 10 years commencing May 1, 1945, and there- after in annual installments of \$16,000.00	100,000.00
October	15, 1944	6%	\$10,000.00 payable annually commencing	·
Marmuhar	1 1011	e~-	October 15, 1947 \$15,000.00 payable annually for 10 years	100,000.00
November	1, 1944	070	commencing November 1, 1948, and thereafter in annual installments of	
*	4 4015	۵~	\$50,000.00.	300,000.00
June	1, 1045	070	\$10,000.00 payable annually commencing June 1, 1947	100,000.00

Bond premium and discount has not been amortized for the year 1944-45, and adjustments should be made as follows:

Discount on refunding bonds applicable to year 1944–45.... \$1,472.85 Premium on building bonds applicable to year 1944–45..... 2,801.63

Proper provisions for depreciation of buildings and equipment for the year 1944-45 are:

		Provisions
	1944-45	of Previous
Asset	Provision	$\underline{Y}$ ears
Buildings	\$113,453.87	\$199,434.09
Equipment—		
Departmental	74,987.03	164,712.60
Building	11,395.66	17,918.24
Total depreciation	\$199,836.56	\$382,064.93

Other than the facts mentioned, your audit reveals the books to be in accordance with the true condition of affairs.

### PROBLEM 49

# VENTURE IN STOCKS

Dabnet Blake and Alfred Cassels, on August 1, 1946, opened a joint account with Marstens & Co., brokers, and proceeded to trade actively in listed stocks. On September 15, having made a profit, which they will share equally, they decided to close the account and distribute the balance. Blake agrees to take over the long stocks while Cassels will assume the short sales under his own name. They call upon you to prepare a statement of profits earned, detailed by stocks, and a statement showing how the cash proceeds should be distributed. You are furnished with the following information (letters are substituted for names of stocks):

(a) Blake deposited with the broker, upon opening the account, certain shares, which the broker sold shortly thereafter, as follows:

	Name of	$\mathbf{Cost}$	Market Value
Shares	Stock	to Blake	August 1, 1946
300	A	\$ 35,266.80	\$ 1,575.00
880	B	318,560.00	21,450.00

- (b) Cassels deposited \$10,000.00 cash in the joint account.
- (c) Transactions during the 45-day period, abstracted from the broker's statements:

						Balance,	
Name of	Pu	chases	S	ales	Sept	ember 15, a	t Cost
Stock	Shares	Amount	Shares	Amount	Shares	Long	Short
$\boldsymbol{A}$	2,540	\$15,634.90	3,040	\$28,730.85	200		\$1,684.32
$\boldsymbol{B}$	1,350	35,119.84	1,800	46,347.02	430	\$11,851.36	
С	700	352.50	700	4,980.25			
D	800	10,268.13	1,000	15,462.47	200		3,895.50

- (d) Interest allowed by broker, \$15.33. Dividends on B stock credited to the brokerage account amounted to \$200.00.
  - (e) Market values at September 15: A, 9½; B, 25; D, 18%.
- (f) Commissions and taxes are included in all the above figures, and no further adjustment need be made therefor.

# PROBLEM 50

# EXECUTOR'S ACCOUNTS

You are called upon to prepare a certain statement for an executor. You ascertain the following facts:

James Parker died on July 2, 1945, leaving an estate as reflected in his books of account:

Cash in closed bank	2,520.00	
Cash in First National Bank	8.486.33	
Stocks, at cost	345,024.50	
Bonds, at cost	73,297,25	
Real estate (home), at cost	24.500.00	
Home furnishings	10.200.00	
Dividends declared, but not received	832.00	
· —		\$464,860.08
6% first mortgage, secured by real estate \$	19,550.00	•
Accrued interest on mortgage	97.75	
5% demand bank loan, secured by stocks de-		
posited as collateral	50,000.00	
<u>-</u>		69,617.75
Net worth, per books		\$395,212.33

Cash on hand at the date of death was \$138.00. Unclipped matured coupons amounted to \$237.50. In addition to the liabilities expressed above, there was additional accrued interest of \$195.50 on the mortgage and \$266.84 on the bank loan, and accrued property taxes of \$441.72. Household bills unpaid were \$349.78. The market value of the stocks was \$234,943.52, and of the bonds, \$54,633.57, while the real estate was appraised at \$22.425.90 and home furnishings at \$5,850.00. Cash in the closed bank was estimated to be 50 per cent collectible.

On March 1, 1946, title to the real estate and home furnishings was conveyed to the widow in accordance with the terms of the will.

Receipts and disbursements of the executor, R. S. Tait, from July 5, 1945, to and including July 1, 1947, were as follows:

Receipts—		
Cash in bank	\$ 5,486.33	
Cash on hand	138.00	
Interest received on bonds	5.849.19	
Interest on bank balance	102.77	
Dividends received	7,400.50	
Proceeds of insurance policies	20,000.00	
Sales of stocks (cost, \$76.418.92; market		
value at date of death. \$64.954.30)	59,681.38	
Sales of bonds (cost \$21,416.\$1; market	•	
value at date of death, \$20,350.90)	18,138,21	
Dividend on deposit in closed bank	252.00	
•		\$120,048.38

Disbursements—			
Specific bequests to relatives	\$20,500.00		
Specific bequests to charitable corporations	35,000.00		
Payments made by court order—			
Bank loan (July 1, 1946)	15,000.00		
Interest on bank loan	2,766.84		
Federal estate tax (final)	12,344.31		
State inheritance tax (one half)	3,539.55		
Allowance to widow	27,000.00		
Interest on mortgage	1,173.00		
Property taxes and household bills	794.50		
Court costs	150.27		
Compensation to executor (final)	1,000.00		
		11	9,268.47
Cash in First National Bank, July 1, 1946		\$	779.91

On July 1, 1946, the values of the unsold securities were as follows:

Security	Market Value July 1, 1946
StocksBonds	

On the same date, the receiver of the closed bank stated that probably 75 per cent of the balances of depositors' accounts then outstanding should be considered worthless.

The executor informs you that the statement he desires is a single comprehensive statement on which the original book balances and the values now remaining may appear, as well as a summary of the transactions that have occurred during the period of administration. He will attach your statement as a supplement to his report to the Probate Court.

From the information given, prepare the statement.

#### PROBLEM 51

### Comparison of Profits

You are called upon to prepare an analysis showing the causes of changes in the 1945 gross profits of the Chanson Specialties Company as compared with those of the prior year. You are furnished with the following statements of profit and loss:

	Ye	ear
<u>Particulars</u>	1944	1945
Sales	\$196,748.91	\$224,625.16

Cost of sales—		
Materials \$ 6	62,959.65 \$ 79,17	0.55
Labor	54,927.14 \$2,42	1.72
Factory overhead	37,382.29 42,40	)2.95
Total cost of sales	65,269.08 \$203.99	)5.22
Gross profit \$		
Selling and administrative expenses	14,407.00 17,37	5.55
Net profit §	17,072.83 \$ 3,25	54.39

Upon investigation, you find that only Product A was manufactured and sold in 1944, while in 1945, both Product A and Product B were manufactured and sold. Your inspection of the various accounts reveals that the sales and cost of sales of Product B were: sales \$100,490.00; materials, labor, and overhead in cost of sales: \$28,137.20, \$23,112.70, and \$12,058.80, respectively. During 1945, the average selling price of Product A was exactly 10 per cent less per unit than in 1944.

Prepare the desired analysis.

### PROBLEM 52

# Analysis of Consolidation Items

For several years, A Company has owned a 90 per cent interest in the capital stock of B Company, and B Company has owned an 80 per cent interest in the capital stock of C Company. C Company manufactures a product, a part of which is purchased by B Company, while A Company uses in its production the entire output of B Company.

At the beginning and end of the last fiscal year of the three companies, the inventories at book cost were as follows:

	Opening	
Company	Inventory	Inventory
A	\$345,000.00	\$183,000.00
В	230,000.00	350,000.00
C	139,000.00	130,000.00

An analysis of intercompany purchases during the several years of affiliation indicates that in each case Companies B and C billed Companies A and B, respectively, at cost plus  $11\frac{1}{2}$  per cent. One-third of A Company's opening and closing inventories consisted of items purchased from B Company, while one-half of B Company's opening and closing inventories.

tories and cost of sales made to A Company consisted of items purchased from C Company.

In preparing consolidated financial statements, you are instructed to eliminate from the profit-and-loss statement covering the above fiscal period all the intercompany profit on inventories, and to prepare brief statements showing the effect of the inventory adjustment on the net profit for the fiscal year as divided between majority and minority interests. The allocation to majority and minority interests is to be computed on each of two bases which arise from the following assumptions:

First basis: Minority stockholders are entitled to their full share of whatever profits, from their viewpoint, are earned.

Second basis: Minority stockholders are subject to their proportion of all the profit adjustments occasioned by their company's sales standing in the inventory of affiliated companies.

#### PROBLEM 53

### ANALYSIS OF REORGANIZATION ENTRIES

During the course of an audit of the books of the Eagle Supply Company in January, 1947, you find certain journal entries made in 1940 that relate to the reorganization of the company, previously known as the Eagle Block Signal Supply Company, and the absorption of another corporation.

You are asked to prepare (a) a statement showing how you would compute the goodwill arising from these transactions, (b) a reconciliation of your statement with the goodwill item originally set up, and (c) an adjusting journal entry (in 1947) to correct the records.

No dividends were paid by the new company, and because of the dissatisfaction arising therefrom, a wholly new board of directors was chosen by the stockholders in November, 1946.

In view of the fact that the present management and book-keeping staff have been in charge of the company's affairs only since December 1, 1946, and that many of the old stock records and files are missing, your interpretation of these transactions is dependent upon the following data, copied, except for the matter in square brackets, from the stockholders' minutes, the general journal, and the cash book:

September 30, 1940 [extract from minutes of stockholders of the Eagle Block Signal Supply Company]—

"Agreement with our profitable competitor, Heigh-Castings Company, was submitted and approved on condition of the improvement of our financial position through the elimination of our building mortgage of \$232,500.00. In view of the fact that holder of our mortgage agreed today to waive interest accrued if principal is paid in full on or before October 4, 1940, President Macomb was authorized to sell to the public at part or more as many as necessary of the remaining 2,500 shares of our treasury stock in order to pay off the mortgage in full, and to proceed with the exchange of the outstanding shares of the old stock for the new in accordance with the plan discussed, one old \$100.00 par-value share for 1 of the new \$100.00 par value 7 per cent non-voting preferred shares and 5 of the \$10.00 par value common shares, the balance of the new issues to be paid to Heigh-Castings Company for its net assets and goodwill."

October 1, 1940 [from journal]— Land, per appraisal. Buildings, per appraisal. Machinery (tentative). Equipment (tentative). Raw materials (physical count; market prices). Work in process (arbitrary estimate, per J. C. M.) Finished stock (book cost). Unexpired insurance (per schedule). Goodwill, per J. C. M. 6% first mortgage payable, due May 20, 1948 (J. C. M.). J. C. M. Personal. Suspense. Recording H. C. deal [Note: The last of the above debits eliminated a liability account of that name in the general ledger.]	\$ 200,000.00 1,023,118.56 500,000.00 20,000.00 335,834.24 11,198.76 39,013.84 2,705.19 96,281.80 232,500.00 119,066.30	\$2,579,718.69
October 1, 1940 [from journal]— Suspense	579,718.69	
6% chattel mortgage on machinery  Accrued interest payable, chattel mortgage—		38,095.00
1/4 period		5,714.25 238,409.44
Treasury stock [at par which was book value]		•
sold to J. C. M. at 93 Officer's salary ( Estimated )		250,000.00 1,652.14
Legal expense by J. C. M.		5,630.00
Travel (J. C. M.)		217.86
[Note: The last three items were credited to corre-		
sponding expense accounts in the general ledger, each posting being accompanied by the explanation, "Reorg. exp." The posting of the fourth credit of this journal entry eliminated an account having the same name.]		
October 2, 1940 [from journal]—		
Accrued interest payable—Chattel mortgage	\$ 5,142.82	

7) / // // // // // // // // // // // //	= 027 =0	
Interest expense—1½ months to October 1 [No interest had been accrued on books for real	5,037.50	l
estate mortgage.]		
Machinery	175,277.24	
Equipment	10,367.07	
Earned surplus—Raw material shortage	4,122.45	
Goodwill	407,840.65	
Reserve for depreciation—Buildings		\$ 255,779.64
Reserve for depreciation—Equipment and ma-		352,822.16
chinery Accrued wages.		15,063.48
Goodwill—Correction of H. C. raw material		4,122.45
inventory		4,122.40
and appraisal, per J. C. M.		
October 4, 1940 [from journal]—	0.000.000.00	
Capital stock	3,000,000.00 3S1,562.77	
Earned surplus	1,237,503.53	
Reorganization expense, details in journal entry	1,201,000.00	
credits of October 1 [carried until 1945 as de-		
ferred charge; you may assume the correctness		
of this deferment of expenses]	7,500.00	
Suspense.	2,000,000.00	1 10 YOU OO
J. C. Macomb, President		146,566.30 4,500,000.00
Common stock, par value.		2,000,000.00
Transfer of stock, per J. C. M		_,000,000.00
[Note: On October 3, 1940, all the nominal ac-		
counts in the general ledger were closed out to		
earned surplus. The effect of the first three		
debits above was to eliminate the accounts bear-		
ing those names.]	70 1 4	75.1
October 4, 1940 [from cash book]—	-	Disbursements
•	\$ 252,500.00	
J. C. M.—Loan to company [still on books in January, 1947, as account payable to J. C.		
Macomb]	47,500.00	
J. C. Macomb, in full—Check 58113	•	\$ 280,000.00
October 31, 1946 [from journal]—		
Treasury stock	125,000.00	102 000 00
Special loan from officer		125,000.00
common stock of this company as security for		
bank loan.		
[Note: You find included in the collateral at the		
First National Bank, on account of the com-		
pany's unpaid bank loan of \$200,000.00 (receipt		
issued to company), Certificate No. C13, endorsed in blank by J. C. Macomb, covering the		
above 12,500 shares. The above two accounts		
in 1947 appear on the books at the amounts		
stated.]		-

#### PROBLEM 54

# Analysis of Investment Account

Theodore Mean met with accidental death on March 31, 1947, and his executor has employed you to investigate certain financial dealings which the decedent had conducted during the 3 months ending March 31, 1947. You find that his records consist of meager memoranda, among which is a diary disclosing the following transactions:

Jan.	20, 1947	Investments purchased (300 Highgate @ 10) Check	
		No. A-4103	\$15,000.00
Feb.	5, 19 <del>1</del> 7	Investments purchased (Highgate @ S) Check No.	•
		A-4127	7,000.00
Mar.	10, 1947	Investments sold (Highgate @ 12) Deposited in First	•
	-	National Bank	20,000.00
Mar.	30, 1947	Investments purchased (Highgate @ 11) Check No.	•
		A-4141	6,500.00

The executor who was Mean's personal attorney tells you that his client's only investment transactions during 1947 were a few purchases and sales of Highgate Apartment Hotel Corporation first mortgage bonds.

The bank holds a note dated March 30, 1947, executed for \$16,500.00, secured by \$300,000.00 of Highgate Apartment Hotel Corporation bonds as collateral. Due to the irregularities of a former employee of the bank, a portion of its records has been destroyed, so that there is no further tangible evidence available. A bank teller who handled the details of the bond transaction informs you that Mean, during the latter part of January, 1947, borrowed from the bank 50 per cent of the cost of his first purchase of bonds, and that as these bonds had no listed market value, whenever Mean made a purchase or sale his loan was increased or decreased to 50 per cent of the value of the remaining bonds computed on the basis of the price established by the latest purchase or sale.

From the above data, determine what the above transactions signify.

### PROBLEM 55

# STATEMENTS FOR PROPRIETORSHIP

You are engaged by R. E. Dixon to audit the books of the Dixon Furniture Company, of which he is the sole owner, for the year ending June 30, 1946. From the following information revealed by your audit, prepare a balance sheet and statement of profit and loss.

Prior to June 30, 1945, the company was engaged in the retail furniture business. Owing to the doubtful prospects for profitable business, Mr. Dixon closed his display rooms on that date, sold his stock in bulk, and, during the past year, has devoted his attention to liquidating the receivables.

The trial balance of the proprietorship on June 30, 1946, per books, was as follows:

$\underline{ ext{Account}}$	$\underline{\mathbf{Dr.}}$	$\underline{\mathbf{Cr}}$ .
Cash in First Trust Bank	\$ 22,821.32	
Cash in Merchants State Bank (in receivership)	7,113.11	
Installment contracts receivable	618,322.05	
Notes receivable	183,762.50	
Inventory of reconditioned merchandise	3,851.45	
Investments (at cost)	530,216.27	
Office fixtures	2,132.51	
Automobile	2,832.00	
Residence (including cost of land, \$5,000.00)	48,216.25	
Reserve for depreciation—Fixtures	·	\$ 1,695.60
Reserve for depreciation—Automobile		904.22
Reserve for depreciation—Residence		6,381.79
Notes payable		15,000.00
6% first mortgage on residence		14,500.00
Accounts payable		432.75
Accrued interest		219.62
R. E. Dixon—Investment, June 30, 1945		1,117,058.04
R. E. Dixon—Personal	12,855.30	
Unrealized profits		190,804.56
Profit and loss	4,312.31	
Interest earned	•	41,302.30
Interest paid	2,575.14	
Dividends received		14,375.50
Profits realized		71,786.15
Sales of repossessed merchandise		9,981.57
Cost of repossessed merchandise sold	12,754.35	
Salaries,	23,850.00	
Commissions	175.00	
Entertainment	1,200.00	
Rent—Office	900.00	
Automobile expense—Gas and oil	556.72	•
Telephone	233.10	
Supplies and postage	651.14	
Advertising	142.75	<b>.</b>
Miscellaneous expenses	4,968.83	
Totals	\$1 484 449 10	\$1,484,442.10
x 0 0 0 10 x x x x x x x x x x x x x x x	$\psi_1, \tau_0 \tau, \tau \tau_2, \tau_3$	w1,101,112.10

Installment contracts receivable were analyzed as follows:

Status of Contracts	Contracts on Which Pay- ments Are Not Being Made	Contracts on Which Payments Are Being Made, but Delinquent	Total Balance Due on Contracts
Installments paid to date	<b>;</b>		\$178,591.63
30 days past due	. \$22,524.81	\$179,243.70	201,768.51
60 days past due	. 5,259.25	51,668.42	56,927.67
90 days past due	. 17,216.79	62,384.19	79,600.98
Over 3 months past due.	6,161.55	8,170.64	14,332.19
Over 6 months past due.	. 23,043.36	64,057.71	87,101.07
Total contracts	. \$74,205.76	\$365,524.66	\$618,322.05

Cash collected on accounts receivable during the year amounted to \$239,287.17.

In reviewing the various accounts receivable with Mr. Dixon, you estimate that 30 per cent of the \$74,205.76 is possibly uncollectible. All accounts known to be bad have been written off, and where possible the furniture has been repossessed.

Mr. Dixon states that, with the exception of one series of notes receivable totaling \$955.00, all notes receivable will be ultimately honored. You find, however, that notes amounting to \$32,481.56 are past due.

A recapitulation of the entries in the reconditioned merchandise account follows:

Particulars	Dr.	<u>Cr.</u>
Accounts receivable balances closed out Refinishing and reupholstering expenses Cartage on returned merchandise	5,161.69	
Charges to repossessed merchandise sold Balance		\$11,554.35 3,851.45
	<u>\$15,405.80</u>	\$15,405.80

Investments are composed of marketable securities with the exception of \$12,000.00 in first mortgage bonds which are in default, both as to interest and prepayment of principal, and which had been deposited with a bondholders' committee. The market value of the balance of the investments on June 30, 1946, was \$326,509.38. Of \$4,202.98 interest received on personally owned bonds, \$2,500.00 was received from 2 per cent tax-free covenant bonds.

Rates of depreciation that had been used in prior years were:

\* Red.

Mortgage notes	35,500.00	24,600.00
Reserve for development		27,918.00
Unrealized profits	1,645,588.46	1,512,578.25
Realized undistributed profits	1,329,532.82	1,218,036.43
Total liabilities and net worth	\$3,392,070.61	\$3,099,459.87

# Other information follows:

1. Receivables represent principally balances owing on installment sales of vacant real estate lots, and are payable over a period of from 1 to 5 years:

Particulars	December 31, 1945	December 31, 1946
Real estate installment contracts Accrued interest thereon Sundry	32,336.14	\$1,796,705.35 57,412.20 139,086.17
Total	\$2,160,365.66	\$1,993,203.72

Analysis of changes in installment contract receivables:

	Contr	Contracts Unrealized		Contracts Unrealized Prof		Profit
Particulars	Principal	Accrued Interest	Principal	Accrued Interest		
Balance—January 1, 1946 Net canceled sales and net gross loss	\$1,962,334.07	\$ 32,336.14	\$1,495,465.97	\$ 32,336.14		
thereon—1946 Interest charges—	2,090.88*		28,117.54*			
1946		114,032.95		114,032.95		
Collections in 1946 on all contracts Collections in 1946 and prior years on contracts can-	218,313.83*	88,956.89*	165,169.56*	88,956.89*		
celed in 1946	54,775.99		41,776.76			
Balance—December 31, 1946	\$1,796,705.35	\$ 57,412.20	\$1,343,955.63	<u>\$ 57,412.20</u>		

Upon cancellation of a real estate contract the following bookkeeping procedure is followed:

<sup>(</sup>a) The sale is reversed at the original sales price, and the cost of the lot is reinstated in the inventory account at cost.

(b) All collections to date of cancellation are transferred to "Cash received on contracts canceled" as shown in the statement of profit and loss.

There were no charges made to sundry receivables during 1946..

In addition to the above, unrealized profit was affected by the following:

- (a) Unrealized profit on contract with Village of Spa. In 1940 the partnership installed a water system in a subdivision annexed to the Village of Spa. The cost was charged to the reserve for development. On January 5, 1945, an agreement was reached with the Village providing for the reimbursement of the cost by payment to the partnership of 20 per cent of the receipts from water bills issued to users in the subdivision. A credit offsetting the receivable appears in unrealized profits.
- (b) Accrued real estate taxes which are deferred to the year of payment.
- 2. Special assessments paid during 1946 on real estate held for sale were \$3.090.30.
- 3. Advances to Coral Islands Corporation, a winter resort, 90 per cent of whose stock is owned by the partners individually, decreased as follows:

Charge-off as bad debt of interest regarded as earned on ac-	
cumulated advances from 1941 to 1945, inclusive	
Less-Cash advances and liabilities assumed by partner-	
ship during 1946	20,941.81
Net change	\$101,175.85

4. Changes in the account of office furniture and fixtures were as follows:

Balance—January 1, 1946.	\$3.994.76
Purchase of typewriter	
Allowance on typewriter: cost, \$120.00; depreciation accrued	
thereon, \$\$0.00.	
Depreciation expense 1946.	996.01*
Balance—December 31, 1946	\$3.078.75

<sup>\*</sup> Red.

<sup>5. &</sup>quot;Other" liabilities consisted of current expenses; those at December 31, 1945, were paid in full during 1946.

<sup>6.</sup> Of the \$600,000,00 originally set up as a reserve for the

improvement of subdivision acreage, \$45,321.00 remained unexpended on December 31, 1945, and \$27,918.00 at December 31, 1946, the decrease representing expenditures on the construction of streets and sidewalks. The balance will be expended during the next few years on other improvements.

7. Changes in the net-worth accounts are analyzed below:

Particulars	Unrealized Profit	Realized Undistributed <u>Profit</u>
Balance—January 1, 1946	\$1,645,588.46 133,010.21	\$1,329,532.82
the year ending December 31, 1946 Withdrawals by partners		22,646.99 88,849.40
Balance—December 31, 1946	\$1,512,578.25	\$1,218,036.43

8. Following is a summary of profit and loss for 1946, prepared by the bookkeeper:

Gross profit realized on collections— Installment contracts Interest Village of Spa	\$165,169.56 \$8,956.89 139.67	\$254,266.12
Income from cancellations— Total cash received to date of cancellation Less—Gross profit reported above or in	\$ 54,775.99	
prior years	41,776.76	12,999.23
Commissions received		5,767.68
Tota` income		\$273,033.03
Less—Expenses— Bad debts. Taxes. Depreciation of furniture. Depreciation of bonds. Other expenses.  Net loss.	48,045.16 996.01 450.00	295,680.02 \$ 22,646.99

#### PROBLEM 57

# CORRECTION JOURNAL ENTRY

In making your annual examination of the records of a manufacturer of paints for the calendar year 1945, you learn that during the year 1945 the company opened a retail store in or-

der to liquidate the "private-label" merchandise it had previously sold and was able to recover from an insolvent customer. The merchandise, which was taken in satisfaction of an account receivable of \$17,396.50, had cost the manufacturer \$6,315.12 to produce, and had been sold to the customer for \$\$,420.16. Further investigation reveals that shipments of merchandise had been made to the store out of the factory stockroom but that no entries were made on the general books; the shipping records showed that paints costing \$2.733.40 had thus been transferred. Cash received from the store was credited to the customer's account.

Following is an analysis of the account due from the customer:

Date	Rei	Dr.	$\underline{\text{Date}}$		Ref.	Cr.
	Subtotal	\$159,816,29		Subtotal		\$142,419.79
			7-31-45		CR	500.00
			7-31-45		Ţ,	5.396.85*
			8-31-45		CR	1.100.00
			9-30-15		CR	1.000.00
			10-31-45		CR	1.509.00
			11-30-45		CR	2.550.00
			12-31-45		CR	1.750.00
				Balance		3.599.65
		\$159.816.29				\$159.816.29

<sup>\*</sup> Represents 50 per cent of account receivable estimated by you at December 31, 1944, as being uncollectible, and provided for by a like addition to the reserve for bad debts at that date.

No books were kept at the store except duplicate sales invoices, invoices for purchases, and checkbook. The sales invoices showed that sales totaling \$10.427.36 had been made during 1945: the purchase invoices showed that purchases totaling \$598.02 had been made, composed of outside merchandise \$563.95 and store supplies \$34.07. The checkbook contained the following information:

Cash received from—			
Cash sales	\$8.529.47		
Collections on charge sales	1.708.70		
		\$10	.238.17
Cash disbursed for—			
Transfers to main office.	\$8,400.00		
Rent of store	450.00		
Salary of clerk.			
Payment of purchases			
•		10	0,048.02
Balance in bank, December 31, 1945		\$	190.15

Following is the store inventory at December 31, 1945: .

Class of Merchandise	Purchase Price	Manu- facturing <u>Cost</u>	Factory Selling Price to Customers	Estimated Retail Value
Recovered from customer. Factory shipments Outside purchases		\$1,508.96 543.87	\$2,011.95	\$2,148.75 796.80 66.09

Prepare an adjusting journal entry to correct the company's books as at December 31, 1945.

#### PROBLEM 58

### Computation of Minority Interest

Following is a summary of the investments and net worths of J. R. Bruce Company and Larton Manufacturing Company at December 31, 1946:

•	J. R. Bruce Co.	Larton Mfg. Co.
Investments, at cost— 4,000 shares Larton Mfg. Co	\$ 36,000.00	\$10,000.00
Net worth—		
Capital stock— 5,000 shares issued and outstanding 10,000 shares issued and outstanding Earned surplus—	\$100,000.00	\$50,000.00
Balance, January 1, 1946	4,963.84 2,496.22	6,487.16 8,962.80

If a consolidated balance sheet were prepared, what portion of the consolidated deficit would apply to the minority stockholders of that company? Devise a formula that may be applied to obtain the minority interest in the consolidated surplus or deficit.

### PROBLEM 59

### Computation of Bonus

Ferdinand Products Company has an executive bonus plan whereby the management receives one-third of each year's net profit, after deducting accrued State and Federal income taxes but before deducting the bonus.

In computing net income subject to State tax, deductions for bad debts may be made only on the basis of actual chargeoffs, while for Federal income-tax purposes the accrual basis has been consistently followed. The accrued executive bonus may also be deducted on the State return, but income taxes, both State and Federal, are deductible thereon in the year paid. On the Federal return, the exact amount of the State income tax may be treated as an expense in the year of accrual and depreciation of \$500.00 may be deducted over and above the annual provision appearing on the books.

Net profit per books for 1946 was \$45,343.51 after deducting accrued State income tax of \$1,500.00, accrued Federal income tax of \$4,500.00, and provision of \$3,000.00 for bad debts. Income taxes accrued in 1945 and paid in 1946 were: State, \$2,500.00; Federal, \$5,000.00. Bad-debt charge-offs in 1946 were \$2,000.00.

No minimum income exemptions are allowable in computing the State tax. The State tax rates are: 1 per cent on the first \$1,000.00, 2 per cent on the next \$1,000.00, 3 per cent on the next \$1,000.00, 4 per cent on the next \$1,000.00, 5 per cent on the next \$1,000.00, and 6 per cent on net income in excess of \$5,000.00. The Federal tax rate may be assumed to be 30 per cent.

Ascertain the executive bonus for 1946.

# PROBLEM 60

# ANALYSIS OF TRIAL BALANCE

Following is a trial balance, by total debits and credits, of the accounts of a joint venture known as "R and B Special," from which you are called upon to make certain analyses:

Account	Deoit	Credit
Cash on hand	\$118,717.48	\$118.020.19
Brokers' receivables	83,568,02	65,339.15
War-savings bonds	32,316.16	\$2,698.33
Stocks	112,258.97	•
Payable to brokers, etc	72,572,40	116.144.38
3% sales tax	1,131.63	2,434.02
Paul Rady	1,085.78	17,500.00
E. R. Barnes	1,000.00	7,000.00
Stock sales	•	81,134.00
Interest received		680.00
Salaries	4,500.00	
Expenses	4.903.74	1,107.11
Totals	\$432.057.18	\$432,057.18

The trial balance, exactly as reproduced above, is in the handwriting of Arthur Bore, former bookkeeper, who has disappeared and taken with him or destroyed the books of account and all other records. Bore was in the employ of Paul Rady, a broker, and kept the books of the joint venture in addition to performing other duties in Mr. Rady's office. You are asked to determine from such meager information as is available whether it is possible that Bore, who was fully bonded, has appropriated any assets belonging to the venture. In addition to the trial balance, Mr. Rady has supplied you, mostly from memory, with the following information:

- (a) The venture is about one year old and was formed between himself and E. R. Barnes, a former associate, for the purpose of speculating in the listed common stock of a certain corporation, the partners having contributed initial capital of \$15,000.00 and \$5,000.00, respectively. No compensation for personal services was to be allowed to either venturer. Profits were to be shared three-fourths and one-fourth, respectively. Fourteen thousand shares were purchased at different times and at different prices, the average price being somewhat in excess of \$8.00 per share. Sales of 10,500 shares have been made at prices a trifle less than the purchase price. The balance of the shares is in Mr. Rady's possession and has a present market value of \$9.00 per share; it is to be valued at average cost.
- (b) There is a check on hand from a purchaser of stock amounting to \$697.29. The drawee bank is, however, in the hands of a conservator.
- (c) Accounts receivable from vendee brokers and accounts payable to vendor brokers upon circularization by Mr. Rady are found to agree with the balances indicated on the above trial balance.
- (d) The War Savings bonds were purchased from excess funds at par plus accrued interest of \$316.16, and have all been sold. Of the sales, bonds having a par value of \$31,000.00 were disposed of at 102 plus accrued interest of \$57.00; the remaining \$1,000.00 bond was sold at 101 plus an uncertain amount of accrued interest, and the bookkeeper was accused shortly before his departure of having written off the bond and retained the proceeds from its sale. He insisted, however, that the proceeds had been accounted for properly.
  - (e) The sales tax was erroneously accrued by the book-

keeper, as a tax is payable to the State only on sales of socalled "tangible" personal property. Any sums already paid are recoverable from the State.

- (f) A personal expense of Mr. Rady's amounting to \$85.78 was properly transferred from expenses to his personal account. Each partner has withdrawn \$1,000.00 in cash.
- (g) The expenses of the venture, which, according to the trial balance, total about \$3,800.00, were paid by Mr. Rady's brokerage firm and are apparently correct.

Prepare an analysis of the above trial balance and state whether any of the suspicions which have been directed against the bookkeeper may be correct.

Prepare also a tentative balance sheet and statement of operating results from the information that has been made available to you.

What further steps, if any, would you take to verify the report and figures you have submitted?

### PROBLEM 61

### NET-WORTH ANALYSIS

From the following information, construct the net-worth section of the Lloyd Manufacturing Company's balance sheet at December 31, 1941:

(1) In February, 1939, when the corporation was established under the laws of the State of Delaware, it acquired all the net assets of the Lloyd Paper Box Company. The book value of the net assets to the transferor was \$602,349.88. including goodwill of \$100,000.00. Stock authorized and issued for these net assets consisted of 40.000 shares of nonvoting no-par cumulative preferred having an annual dividend rate of S0 cents per share, payable on February 1, a stated value, as determined by the directors under the authority of the charter and by-laws, of \$10.00 a share, and a redemption price of \$12.00; and 20.000 shares of no-par common having a stated value of \$5.00 per share. These shares were issued prorata to the stockholders of the old company, 10 shares of preferred and 5 shares of common being exchanged for each outstanding \$100-par-value share of the predecessor company. The excess paid-in value of \$102,349.88 was credited to surplus.

(2) The subsequent history of the surplus account is as follows:

Balance of earned surplus at February 1, 1939, on books of Lloyd Paper Box Company		\$909 940 og
Less—Portion capitalized on transfer to new com-		\$202,349.88
pany		100,000.00
Balance appearing on books of new company  Net profit—  1939 (February 1—December 31)	Ф 92 <b>/</b> 99 92	\$102,349.88
1940. 1941. 1942. 1943.	\$ 36,423,26 29,375,87 6,391,22 2,800,17 112,647,90* 148,402,55*	186,059.93*
	140,402.00	100,000.00
Amount in excess of stated value received on sale, on July 1, 1941, of 20,000 shares of newly authorized no-par preferred at \$11.00 per share		20,000.00
by-laws on July 1, 1944— Reduction in stated value of preferred to \$6.00		240,000.00
Reduction in stated value of common to \$1.00 Write-off of goodwill on July 31, 1944, authorized by		80,000.00
Board of Directors		100,000.00*
of National Appraisal Company as at July 31, 1944, as authorized by Board of Directors		102,968.23*
bankrupt in 1944, although in previous years believed solvent		49,650.37*
Balance, December 31, 1944		\$ 3,671.35
* Red.		

(3) Among the assets at December 31, 1944, is an item of reacquired stock representing the repurchase for cash from the company's president on that date of 1,000 shares of common stock at \$8.00 a share. It is expected that this stock will be resold during 1945.

#### PROBLEM 62

### INVENTORY VALUATION

You have been asked to prepare a table showing the computation of cost of sales (with unit costs accompanying each item of the table) following (a) the company's method of in-

ventory valuation, and (b) your method of inventory valuation at first-in-first-out cost. You are further asked to append your comments on the company's inventory-valuation methods.

According to the records of the Lasko Mining Company the following inventories were at hand on January 1 and December 31, 1946:

	Short 10hs	
<u>Item</u>	January 1	December 31
Raw ore	50,000	20,000
Partly processed ore	5,000	15,000
Oxylite, ready for shipment	25,000	5,000

The raw ore was valued at \$4 and \$4.345 per ton at the beginning and end of the year, respectively, and at \$4.345 during the year; these values were described as annual-average market prices elsewhere for similar raw ore at the mouth of the mine. None of the raw ore is sold to the public, but in the company's income statement appears an "earnings" account of \$\$69,000 which reflects the credit for the 200,000 tons of raw ore mined during 1946. According to officers of the company, the "partly processed" ore had accumulated 10 per cent of the reductionplant expenses applicable to each ton of raw ore processed (a statement you may assume is correct); it was valued for inventory purposes at one-tenth more than the market figures for raw ore. Oxylite, the reduced oxide of a rare metal, is the company's finished product; the opening and closing inventories were priced at \$8.39 per ton, a basis of valuation followed for several years and derived from a "cost" formula established years ago. Sales of oxylite during 1946 amounted to \$1,168,200.

You find that the mining expenses for the year, including depletion, were \$198,900.00, and that these costs were merged with reduction-plant expenses of \$629,850.00 in the company's own cost-of-sales statement. The cost per ton of the inventories at the close of the previous year you determine to be: raw ore, \$1.0428; ore in process, \$1.27; finished oxylite, \$4.328.

During 1946, 20,000 tons of the ore were lost (as dross having no value) in the final stages of the reduction-plant operation.

# PROBLEM 63

# ANALYSIS OF SUBSCRIPTIONS ACCOUNT

On May 4, 1943, you are called upon to prepare certain information preceding the liquidation of Employees Securities, Inc.

Employees Securities, Inc., was established November 1, 1940, with an authorized capital stock of 3,000 shares having a par value of \$100.00 each. The purpose of the company was to enable the employees of the Pioneer Leather Company to acquire capital stock of the latter company by collective purchase on the open market. All the authorized stock was immediately subscribed for and payment was to be made at the uniform rate of 2 per cent down and 2 per cent on the fifth of each succeeding month. Unpaid subscriptions bore 6 per cent interest. No stock was to be issued until fully paid, except qualifying shares.

The first transaction of Employees Securities, Inc., was to purchase 1,000 shares of Pioneer's preferred stock at an average cost of \$86.50 a share and 10,000 shares of Pioneer's common stock at an average cost of \$19.25 a share. Funds were advanced for the purchase by Pioneer. On May 1, 1943, the market value of the preferred was \$40.00 a share, and the common, \$5.00 a share.

At the beginning of 1943, it became evident that, owing to drastic cuts in the number of employees at the end of 1942 and in rates of compensation for those remaining, many subscribers already in arrears on their monthly installments would be unable to complete their subscription contracts. Accordingly, the subscribers, at a meeting held on April 29, 1943, gave the directors authority to liquidate the company in a manner most equitable for all concerned, with due regard for the subscribers who were in a position to continue their monthly installments. Under this authority, and the authority contained in a by-law providing for the cancellation of subscriptions the installments on which were four months in arrears, the Board decided to:

- (1) Establish the equity of all subscribers at May 1, 1943;
- (2) Liquidate subscriptions on which installments are unpaid 4 months or longer at May 1, 1943, on the basis of the amounts that should have been paid in on that date, but with no liability on the part of subscribers beyond the total sums actually paid in by them:
- (3) Sell enough stock of the Pioneer Leather Company to provide for such liquidation;
  - (4) Permit and perhaps later require subscribers less than

4 months in arrears to complete their subscription contracts in full; and

(5) Dissolve the company by a distribution of the remaining net assets when the balance of the subscriptions has been paid.

Following is a trial balance of the company's books at the close of business on May 1, 1943:

20 01 2 1211 2, 20 20 1	<u>Dr.</u>	Cr.
Cash in bank	\$ 4,593.22	
Unpaid stock subscriptions		
Accrued interest	6,223.75	
Cost of incorporation.	476.00	
Investment in Pioneer Leather Company, at	110.00	
cost—		
1,000 shares of 7% cumulative preferred	86,500.00	
11,000 shares no-par common	200,000.00	
Accounts payable now due	·	\$ 224,99
Bank loan, due May 10, 1943		75,000.00
Capital stock		300,000.00
Surplus, May 1, 1942		5,134,43
Dividends received since May 1, 1942, from		-,
Pioneer Leather Company—		
Preferred		7,000.00
No-par-value common stock, at rate of		•
\$1.00		10,000.00
Stock dividend of 10% on no-par-value		,
common stock, received September 1,		
1942, valued at market as of date of		
declaration August 1, 1942		7,500.00
Interest received and accrued on unpaid stock		.,000.00
subscriptions		11,235.35
Proceeds from life insurance policy on life of		11,-00.00
president		50,000.00
Interest paid through May 1, 1943, on bank		00,000.00
loans	5,852.50	
General and administrative expenses.	350.30	
Totals	\$466,094.77	\$466,094.77

Unrecorded income tax amounts to \$691.98.

The tabulation below details the classes of subscriptions in arrears:

Number of Subscribers	Amo	dividual ounts Sub- ibed for	Number of Monthly Installments in Arrears	Total Amounts in Arrears	Accrued Interest on Total Amount of Unpaid Sub- scriptions at May 1, 1943*
25	\$	200.00	12	\$ 1,200.00	\$ 150.00
10		200.00	18	720.00	100.00

5	200.00	6	120.00	15.00
5	200.00	4	80.00	20.00
40	250.00	18	3,600.00	425.50
8	250.00	6	240.00	6.00
42	500.00	8	3,360.00	440.25
10	500.00	4	400.00	40.00
20	1,000.00	15	6,000.00	629.50
10	1,000.00	5	1,000.00	50.00
8	3,000.00	6	2,880.00	320.00
6	10,000.00	10	12,000.00	1,500.00
<b>2</b>	10,000.00	4	1,600.00	175.75
1	20,000.00	6	2,400.00	349.50
===	<del></del>	<del></del>		
Less than	four months in arres	ars	6,500.00	2,002.25
			\$42,100.00	\$6,223.75

<sup>\*</sup> Divisible equally among subscribers of each class.

You are asked to determine:

- (1) The equity of the various classes of subscriptions at May 1, 1943.
  - (2) The immediate cash requirements of the company.

# PROBLEM 64

### SPREAD OF COST

The Vidette Manufacturing Company purchases in bulk a raw material which must be separated into 13 grades before processing. Cost is prorated over these grades by the assignment to them of weights corresponding to their salability in the form of finished products. Grade K is weighted at 100; other grades are given weights corresponding to their relative value in production as compared with grade K.

A certain lot of the raw material was purchased for \$3,638.45 and consisted of 737 items. The table following shows the grades into which the items fall, the factors assigned each grade, and the quantity.

Grade	Factor	Quantity
$\mathbf{A}$	40	25
В	45	100
C	50	125
D	55	50
${f E}$	60	75
$\mathbf{F}$	65	30
G	70	
H	75	43 75

I	80	75
J	90	30
K	100	42
$\mathbf{L}$	110	38
M	115	29
		737

What cost should be assigned to each item in the various grades?

### PROBLEM 65

### STATEMENTS OF MANUFACTURING COMPANY

The Arnold Company has the exclusive right to manufacture a product that it sells with optional attachments, some of which it also manufactures. For the purpose of determining relative efficiency, the various departments of the business except jobbing are credited with their outputs at prices comparable to those charged by outside suppliers.

Castings from the foundry are machined and assembled in the machine shop. The specialty department manufactures several of the optional attachments sold with the main product. Finished products of the machine shop and specialty department are transferred to the jobbing department for sale to customers.

From the trial balance and information following, prepare (a) a balance sheet and (b) a statement of profit and loss showing departmental gross profit:

, , , , , , , , , , , , , , , , , , , ,	Trial B	alance
	December	31, 1946
$\underline{ ext{Account}}$	Dr.	<u>Cr.</u>
Cash in bank\$	40,325.62	
Cash on hand,	250.00	
Accounts receivable	135,627.48	
Reserve for bad debts		\$ 25,628.32
Book inventories—December 31, 1946	108,933.24	
Prepaid factory supplies	2,516.34	
Unexpired insurance premiums	1,596.14	
Unamortized bond discount	5,737.50	
Land	51,125.62	
Building	290,046.91	
Machinery and equipment	175,127.60	
Office furniture and fixtures	15,437.82	
Salesmen's automobiles	10,487.25	
Truck	2,400.00	
Reserve for depreciation—		
Building		40,027.95
Machinery and equipment		53,701.69

Office furniture and fixtures		A 150 71
Salesmen's automobiles		4,158.71
		3,993.63
Truck		900.00
Accounts payable		35,087.39
Notes payable		27,963.56
Accrued factory payroll		2,780.54
6% first mortgage bonds		170,000.00
7% cumulative preferred stock, \$100.00		175 000 00
par value		175,000.00
Common stock, \$10.00 par value	010 000 00	200,000.00
Surplus	216,632.80	1 017 *00 14
Net sales	1 007 1 10 70	1,817,562.14
Jobbing purchases	1,265,149.70	
Foundry—	105 71 1 00	
Purchases	425,114.80	
Direct labor	100,696.80	
Supervision	15,809.96	
Insurance	3,500.98	
Supplies and expense	5,268.41	
Departmental sales		623,588.20
Machine shop—		
Purchases	701,460.59	
Direct labor	88,401.22	
Supervision	10,018.80	
Insurance	4,261.20	
Supplies and expense	2,897.72	
Departmental sales		947,441.60
Specialty department—		
Purchases	146,291.52	
Direct labor	30,022.44	
Supervision	4,286.78	
Insurance	1,081.96	
Supplies and expense	1,598.76	
Departmental sales		230,372.90
Heat, light, and power	11.108.96	•
Taxes—Real estate	12659.08	
Sales salaries	59,408.91	
Sales expenses	27,762.28	
Officers' salaries	149,280.16	
Office salaries	114,509.78	
Bad debts	18,175.62	
Insurance	10,081.56	
Rent of general office	18,000.00	
Office stationery and supplies	26,409.18	
Other expenses	35,601.68	
Truck expenses	3,650.18	
Interest paid on bonds	7,650.00	
Other interest paid	1,650.28	
Income tax on bond interest	153.00	
Totals	94 259 208 82	64 926 906 69
Totalo	⊙±,555,200.05	\$4,358,206.63

The inventories at January 1, 1946, and December 31, 1946, unadjusted for interdepartmental profit, follow:

Particulars	January 1, 1946	December 31, 1946
Inventories—		
Finished products in jobbing department—		
Outside purchases	\$ 24,028.46	\$ 17,186.92
Transfers from—	•	•
Machine shop	62,140.77	50,475.09
Specialty department	15,808.52	15,412.69
Raw materials in—	•	•
Foundry	12,268.40	10,068.92
Machine shop (outside purchases)	17,180.91	13,229.40
Specialty department	3,418.91	2,560.22
Totals	\$134,845.97	§10S,933.24

The interdepartmental billings during the year 1946 were as follows:

		——-To		
	Foundry	Machine Shop	p Jobbing	Together
By— Foundry Machine shop Specialty department.		\$623,588.20	\$ 918,967.25 230,372.90	\$ 623,588.20 947,441.60 230,372.90
Totals	\$28,474.35	\$623,588.20	\$1,149,340.15	\$1,801,402.70

The complete output of the foundry is transferred to machine shop. The billings by the machine shop to the foundry represent defective castings returned. These were charged to foundry purchases.

Depreciation should be computed at the following annual rates:

Assets	Rate
Buildings	2%
Machinery and equipment	
Office furniture and fixtures	10%
Salesmen's automobiles	25%
Truck	25%
	=

An analysis of the fixed-asset accounts reveals the following changes during the year:

Assets	Balance—	Additions	Balance—
	January	During	December
	1, 1946	1946	31, 1946
Building		\$11,532.29	\$290,046.91
Foundry  Machine shop  Specialty department	59,306.75	3,519.69	62,826.44
	76,884.92	10,227 6S	87,112.60
	23,680.19	1,508.37	25,188.56

Office furniture and fixtures	13,230.85	2,206.97	15,437.82
Salesmen's automobiles	10,487.25		10,487.25
Truck	2,400.00		2,400.00
	=======================================		

Certain factory overhead expenses are to be distributed as follows:

		~To	
Expense	Foundry	Machine Shop	Specialty
Building depreciation Heat, light, and power Real estate taxes	35% 40% 35%	40% 45% 40%	25% 15% 25%

The bond issue was floated October 1, 1942, at a discount of 5 per cent and is due October 1, 1952, without prepayments. The bond interest is payable April 1 and October 1. Income tax payable under the 2 per cent tax-free covenant clause should be accrued.

A provision for bad debts was made monthly on the basis of 1 per cent of net sales. A review of the accounts receivable reveals that the reserve at December 31, 1946, to provide for normal losses, should be \$28,416.97.

An analysis of the surplus account since January 1, 1945, is as follows:

Particulars	Amount
Balance—January 1, 1945	
Balance—January 1, 1946	\$181,945.45*
Preferred dividends paid for years 1945 and 1946.	\$192,132.80* 24,500.00
Book balance—December 31, 1946	\$216,632.80*

<sup>\*</sup> Red.

The truck mileage was used approximately 50 per cent for hauling raw materials to the foundry and 50 per cent for hauling shipments from the warehouse to freight depots.

Selling and administrative expenses are not allocable to the several departments,

#### CONSOLIDATED STATEMENTS

From the information following, which you determine to be correct, prepare a consolidated balance sheet and statement of profit and loss:

Aetna Publishers, Inc., is an operating and holding company with two subsidiaries: one a printing company; the second, a jobber of paper and printing supplies, now on practically a nonoperating basis because of the depression. The parent company markets several series of educational books turned out by its subsidiary and by other printing establishments. The parent company's trial balance follows:

## AETNA PUBLISHERS, INC. Trial Balance—December 31, 1946

Cook in hand

Cash in bank \$	38,694.82	
Cash on hand	500.00	
Customers, all collectible	287,718.90	
Inventory at December 31, 1946, of books, all of	•	
which were acquired in 1946—		
Purchased from Playders Corp \$48,238.50		
Other purchases	63,117.24	\$ 63,117.24
	00,111.21	0 00,117.21
Advances to—		
Playders Corp	35,200.00	
Printers Supplies Company	171,280.58	
Investment in—	111,200.00	
Playders Corp., acquired on January 1, 1937:		
1,250 shares at cost of \$110.00 per share	137,500.00	
Printers Supplies Company, established in 1941	101,000.00	
at cost of \$\$2,000.00: 500 shares written down	1 000 00	
in 1946 to	1,000.00	
(acquired January 1, 1944, from Playders)		
Corp.; land at cost to transferor, building	40.000.00	
Land { at then fair market value of \$91,000.00 [net }	10,000.00	
after depreciation] as determined by Acme		
Appraisal Co.		
Building	150,000.00	
Reserve for depreciation		72,500.00
Accounts payable		68,284.43
Capital stock authorized and issued—6,000 shares		600,000.00
Earned surplus at January 1, 1946		120,339.12
Sales		848,058.26
Rental income, which may be regarded as a fair		
apportionment to subsidiary companies of de-		
preciation, taxes, and other actual costs		3,600.00
Opening inventory (includes no items acquired		
from subsidiary companies)	36,847.11	
Purchases from Playders Corp	580,723.31	

Other purchases	65,499.62	
ciation of \$4.500.00	34,226.26	
Losses from bad debts, including stock write-down	163,591.21	
Totals	\$1,775.899.05	\$1,775,899.05
The trial balance of Playders Corp.	was:	
PLAYDERS CORP.		
Trial Balance—December 3:	1, 1946	
Incompleted shop orders at December 31, 1946 (no purchases from Printers Supplies Company in-	0.000.00	
cluded)	\$ 32,390.22	
1946 from Printers Supplies Company Machinery and equipment, at cost	82,319.12 123,713.24	\$ 82,319.12
Reserve for depreciation, unchanged since 1944	-	123,713.24
Advances from parent company		35,200.00
at par		150,000.00
preferred stock at less than par		34,525.00
Paid-in surplus from sale of building to Aetna Publishers, Inc., in 1944, at a price exceeding cost of \$130,000.00 less accrued depreciation of \$52,-		·
000.00		13,000.00
Deficit at January 1, 1946, of which \$34.967.81 was		
accumulated prior to 1937	176,087.99	
prices		580,723.31
Paper purchased from Printers Supplies Company	400 004 00	
during 1946.	138,624.33	
Inventory of raw materials and supplies at January 1, 1946, of which \$6,320.33 represents paper ac-		
quired from Printers Supplies Company (no		
orders in process at this date)	54,728.13	
Shop rent paid Aetna Publishers, Inc	3,000.00	
All other shop purchases and direct shop expenses	7	
incurred in 1946	408,617.64	
Totals	\$1,019,480.67	\$1,019.480.67
O-1 f t	.1 1 1	C. D. t. A.
Only a few transactions appear on Supplies Company for 1946. Its trial b		
PRINTERS SUPPLIES CO	MPANY	
Trial Balance—December 3		
Cash in bank, representing checks drawn on bank	ac-	
count of Aetna Publishers, Inc.		\$ 132.99
Customers, all collectible	\$ 504.20 st 2,740.4	

Advances from parent company.  Sales of similar items at similar prices to Playders Corp., at regular market prices; gross margin has re-		171,280.58
mained unchanged during last several years Sales to outside customers		13S.624.33 4,43S.23
Rental paid Aetna Publishers, Inc., for storage space All other direct costs of sales, including purchases of	600.00	2,130,20
\$\$5,764.3\$ and opening inventory of \$2,312.50, less closing inventory of \$2,740.44.	94.775.04	
Officers' salaries	52,000.00	
Capital stock—500 shares authorized and issued  Paid-in surplus from assets contributed in excess of par		50,000.00
value of stock.  Earned surplus, January 1, 1946.	245 256 45	32,000.00
Totals		5000 170 10
TORUS	5030.470.10	\$396,476.13

## BALANCE-SHEET ARRANGEMENT

From the following information prepare a balance sheet of the Goldrox Company at December 31, 1946:

Cash in bank (less checks in payment of accounts payable of \$19,-572.27, dated December 31, 1946, but mailed to creditors January	
5, 1947)	\$ 50,081.97
Petty cash (in which are included advances to employees of \$575.00, which are to be repaid from next payroll)	1,000.00
lieved to be but 50 per cent collectible)	82,064.48
officers of \$10,500.00 for stock subscriptions and of \$2,514.62 on	107 111 70
open account)	137,111.56
Finished goods (including consignments received amounting to	
\$3,095.56)	70,725,26
Work in process (excluding factory overhead of \$4,604.71).	30.290.22
Raw material (merchandise in transit at December 31, 1946, not	
entered on books, \$17,429.70)	56,977.43
Unexpired insurance premiums (in which are included the cash sur-	•
render values of \$21,903.38 on officers' life insurance policies)	27,429.70
Bonds and stocks (market value of listed securities \$132,055.21; un-	
listed stocks consist of investments at cost of \$54,691.50 in affili-	
ated companies)	194.412.93
Deposit with sinking-fund trustee from which matured but unpre-	
sented bonds of \$10,250.00 and unpresented interest coupons of \$922,50 have been deducted	93 91 1 19
Unamortized bond discount and expense.	32,314.13 4.604.71
Land	121,195.02
Building	444,467.18
Equipment, including equipment in use, fully depreciated, which	222,201.10
cost \$37,429.70.	231,752.66

Patents, including worthless patents costing \$11,903.38 on which ac-	199 910 40
cumulated amortization of \$9,215.29 has accrued	132,810.48
Bank loan, on which interest of \$815.00 has been prepaid, secured by bonds and stocks having a book value of \$20,146.22	15,000.00
Subscriptions to stock in affiliated companies, payable January 1,	
1948	17,000.00
Trade accounts payable (included in which are debit balances total-	
ing \$9,859.31)	56,977.43
Estimated liability on contract for raw materials canceled December	0.000.00
20, 1946	9,200.00
Loan from stockholder secured by assignment of notes receivable of	00 000 00
\$22,316.19	20,000.00
Interest accrued on bonds	5,416.67
Other accrued expenses	23,978.16
6½% first mortgage bonds, payable \$5,000.00 semiannually on	
March 1, and September 1, to March 1, 1956, when balance	050 000 00
matures	250,000.00
7% cumulative preferred stock authorized, par value \$100.00	500,000.00
7% cumulative preferred stock unissued and unsubscribed	150,000.00
No-par common stock—2,000 shares authorized and issued, includ-	
ing 200 shares sold to officers on which the company has advanced	
\$10,500.00.	200,000.00
Surplus (before providing for depreciation reserves of \$180,080.34,	
and reserve for amortization of patents of \$110,907.10; but includ-	
ing surplus of \$25,147.78 arising from revaluation of land)	669,665.47

## PARTNERSHIP ANALYSIS

The Plural Manufacturing Company, a partnership established on January 1, 1945, calls upon you to prepare a statement of the capital accounts of the partners for the two years ending December 31, 1946, and a balance sheet as at that date. Following is a trial balance of the general ledger at December 31, 1946:

$\underline{ ext{Account}}$	$\underline{\mathbf{Dr.}}$	<u>Cr.</u>
Cash in bank Accounts receivable. Inventory. Equipment. Sales. Purchases. Labor. Heat, light, and power. Other factory expense, less above inventory. Office salaries. Rent. Interest on loan. Other general expense. Accounts payable, including loan from Betanary and 1945 of 27 000 000	\$ 16,740.90 21,330.74 9,410.30 140,500.00 122,639.71 69,742.80 3,620.00 10,340.29 3,750.00 2,400.00 600.00 6,643.90	\$285,678.32
ters on June 29, 1945, of \$5,000.00		$29,\!470.32$

Partners' accounts—		
Annett-		
Capital		40,000.00
Drawing	7,390.00	•
Betters—	•	
Capital		60,000.00
Drawing		•
Cibell—	•	
Capital		30,000.00
Drawing	16.300.00	•
	\$445,148.64	8445,148.64

Among the provisions of the partnership agreement you find the following:

Loans from partners. The interest rate on loans from partners will be 6 per cent per annum.

Partners' salaries. Salaries of \$5,000.00, \$2,500.00, and \$5,000.00 will be paid to Annett, Betters, and Cibell, respectively. These amounts will be added to the partners' drawing accounts on December 31 of each year.

Partners' drawings. Each partner will be permitted to draw against prospective profits to the extent of 10 per cent of his capital at the beginning of the year. On withdrawals in excess of this percentage, a partner will pay interest at the rate of 1 per cent per month, without compounding, to be computed and charged to the partners' accounts on December 31 of each year. If the drawings of any partner during the year are less than 10 per cent of his capital at the beginning of the year, interest on the difference will be credited to his account at the rate of 6 per cent on the undrawn balance on December 31.

Profit sharing. Each partner will receive a preferential allowance of 8 per cent on his capital account at the beginning of each year. The balance of profit or loss will be shared equally.

In examining the records of the company, you find that the books were not closed at December 31, 1945. The amounts in the partners' capital accounts represent original investments. You also determine that the net profit for the year ending December 31, 1945, after deducting partners' salaries and taking depreciation of \$7.025.00 on equipment but before deducting interest on the partners' accounts amounted to \$12.480.00.

A summary of the partners' drawing accounts follows:

	Annett	Betters	Cibell
1945— January 1 to October 31, inclusive. November 30 December 31	\$2,800.00 300.00 290.00	\$ 6,000.00 \$\frac{4}{9}00.00	\$ 3,000.00 400.00 400.00
Totals	\$3,390.00	\$ 7,740.00	\$ 3,800.00
January 1 to June 30, inclusive July 1 to December 31	1,800.00 2,200.00	3,700.00 2,300.00	2,500.00 10,000.00
Totals	\$7,390.00	\$13,740.00	\$16,300.00

On December 31, 1946, Cibell withdrew from the firm and was given in full settlement \$10,000.00 in cash as shown above, and a 6 per cent two-year note for \$30,000.00 signed by the other partners.

#### PROBLEM 69

#### Balance Sheet After Reorganization

Stockholders of the Ace Manufacturing Company and the G. L. Bays Company have been presented with a plan of reorganization. A summary of the plan follows, together with the balance sheets of the two companies, from which you are asked to prepare a balance sheet of the new company:

Ace-Bays, Incorporated, is to be established with an authorized capital stock of 160,000 7 per cent cumulative preferred shares having a par value of \$25.00 each, and 500,000 shares of no-par common stock.

It is proposed to exchange shares of the new organization for the outstanding shares of the old on the following basis:

- (a) For 1 share of Ace Manufacturing Company's preferred stock, 4 shares of Ace-Bays, Incorporated, preferred.
- (b) For 1 share of Ace Manufacturing Company's common stock, 2 shares of Ace-Bays, Incorporated, preferred and 5 common.
- (c) For 2 shares of G. L. Bays Company's stock, 1 share of Ace-Bays, Incorporated, preferred and 7 common.

Following the transfer of the stock, it is proposed to dissolve the two old organizations and conduct all operations in the plant owned and occupied by Ace Manufacturing Company.

Mortgage holders have agreed to accept 1,400 shares of the new issue of preferred stock in payment of the bonds which matured November 15, 1946, and the accrued interest in default on December 31.

Five thousand shares of common stock are to be sold to the president of Ace Manufacturing Company at \$2.50 per share, and he, in turn, agrees to pay in 30 shares of Ace Manufacturing Company's common stock in satisfaction of the \$1,750.00 charged to his account.

An underwriting syndicate has agreed to take over the balance of the stock not involved in the transfer and to offer it to the public in units of 1 preferred share and 4 common shares at \$40.00 per unit, of which it will turn over to the company \$35.00. Common stock not absorbed in unit sales will be distributed between the underwriters and various individuals, according to agreement, as compensation for services.

Of the cash received from the sale of stock, \$500,000.00 is to be reserved for the purchase of new equipment; \$650,000.00 is to be utilized for paying off accrued wages, bank loans and overdraft, trade acceptances, dividends unpaid, and as many trade accounts payable as possible. The balance is to be added to working capital.

Balance sheets of the two consolidating companies follow:

# ACE MANUFACTURING COMPANY Balance Sheet—December 31, 1946 Assets

Current assets:			
Notes receivable	Ş	73.857.00	
Trade accounts receivable, less reserve for bad			
debts of \$92,605.00		264,310.48	
Advances to officer		1,750.00	
Merchandise		453,332 98	
Raw materials, at the lower of cost or market			\$1,177,325.78
•		<del></del>	
Investments, at cost:			
Bonds of other companies (market value \$9,-			
427.00)	S	62,518.50	
Treasury stock (2,950 common shares)		229,500.00	292,018.50
	_		
Land, buildings, machinery, and equipment at			
sound values, as appraised by Messrs. Cameron-			0.004.0** 40
Grey and Co. on December 31, 1946			2,384,251.60
Prepaid expenses			3,859.02
Patents, goodwill, and copyrights, paid for in com-			202 202 22
mon stock,			200,000.00
Total assets			\$4,057,454.90
Total access			= 1,0,0,1,101,100

## Liabilities and Net Worth

Diabilities and Iver Worth		
Current liabilities: Bank overdraft. Bank loans. Trade acceptances, past due. Notes receivable discounted. Accounts payable. Accrued interest on bonds, of which \$8,295.00 was due November 15, 1946. Accrued wages.	\$ 11,395.48 22,500.00 69,350.00 72,400.00 843,283.09 10,368.75 7,719.43	\$1,037,016.75
6% first mortgage bonds (of which the annual prepayment of \$26,500.00 due November 15, 1946, was not paid)		276,500.00
8% cumulative preferred stock, 15,000 shares authorized and outstanding, par value \$100.00, on which no dividends have been paid since January 1, 1944	1,237,500.00	
495.68	6,438.15	2,743,938.15
Total liabilities and net worth		\$4,057,454.90
G. L. BAYS COMPAN	Y	
Balance Sheet—December 3	1, 1946	
Assets	•	
Current assets: Cash on hand and in banks. Trade accounts receivable. Merchandise. War bonds, at cost, market value \$15,300.00. Prepaid insurance.	\$ 39,681.47 598,300.21 714,674.37 15,075.00 1,963.43	\$1,369,694.48
Furniture and fixtures and equipment at cost; sound value as appraised by Jennings and Knapp on December 31, 1946, \$174,366.57		183,959.69
Total assets		\$1,553,654.17
Liabilities and Net Worth		21,000,001.11
Current liabilities: Trade accounts payable Dividends payable on January 15, 1947 Accrued wages Accrued interest on chattel mortgage	\$ 64,827.95 40,000.00 1,302.52 \$2.20	\$ 106,212.67
	02.20	
Chattel mortgage, in which a payment of \$300.00 is due on March 1, 1947, and installments of \$300.00 each third month thereafter		4,110.00

Reserves:	
Bad debts \$ 26,821	.40
Depreciation	
Net worth:	<del></del>
Capital stock—100,000 shares authorized; \$0,000	
outstanding, par value \$10.00 \$ \$00,000	.00
Surplus—	
Arising from contributions of assets at date of	
incorporation	.52
Earned	
Total liabilities and net worth	\$1,553,654.17

It is agreed that the assets of the new company shall be tangible assets only, which shall be priced at market or current sound values.

You are called upon to prepare a balance sheet of Ace-Bays, Incorporated, on December 31, 1946, on the assumption that all the foregoing transactions were consummated on that date.

#### PROBLEM 70

#### ANALYSIS OF INSTALLMENT ACCOUNT

Smith is a builder of small homes which he sells on the installment plan, retaining title to the property until fully paid for. Earned profits on sales are taken up on his books on the usual installment basis of accounting, and in his Federal income-tax return earned profits from such sales are likewise so reported. Income is returned on the calendar year basis.

On January 1, 1942, Smith entered into a contract with Jones to sell him, on installment terms, a bungalow constructed in 1941. Jones was able to make the installment payments until June, 1946, at which time, due to financial reverses, he relinquished all claims to the property in consideration of his release from further liability on the contract.

From the books of Smith, the following facts are ascertained:

Selling price—Smith to Jones, January 1, 1942	
Total cost of property to Smith (construction completed on	•
December 30, 1941; fair market value in June, 1946,	
\$4,600.00)	6,000.00
Amount of first mortgage on property held by the XYZ Fi-	
nance Co., mortgagee, and signed by Smith, mortgagor;	
mortgage to be assumed by Jones when installment pay-	
ments of \$5,000.00 have been made	4,000.00

1,500.00

Smith had computed correctly the earned profit on the transaction and had reported it in his Federal income tax return in accordance with the tax regulations. (1) What effect will the cancellation of the contract have on Smith's taxable income for the calendar year 1946, and (2) what entries should be made on the books of Smith to reflect the cancellation?

#### PROBLEM 71

## Analysis of Profit Decline

Mr. J. B. Sterling, president of the Nomad Manufacturing Company, hands you the following condensed comparison of operations for the years ending December 31, 1945 and 1946. He believes that a considerable portion of the loss for the year 1946 is attributable to reductions in selling prices not completely compensated for by reductions of the prices of raw materials purchased.

Write a letter to the president pointing out to him the apparent causes for the decline in net profit for 1946.

The data submitted by the president follow:

Particulars	1945	1946
Units sold	211,360	179,864
Sales	\$321,267.20	\$259,004.16
Cost of sales— Raw materials. Direct labor. Factory overhead. Variation in finished goods inventory— Raw materials. Direct labor.	\$237,524.30 23,885.94 23,239.79 4,284.31* 433.43*	\$184,243.92 19,216.51 24,020.65 4,570.11 467.81
Factory overhead		\$233,103.75 \$236,730
Selling expensesGeneral and administrative expenses	23,131.24 15,742.09	24,087.39 16,835.27
Total cost and expenses	\$318,375.80	\$274,026.41
Net profit	\$ 2,891.40	\$ 15,022.25*

<sup>\*</sup> Red.

## ADJUSTMENT OF BRANCH-OFFICE TRIAL BALANCE

The Wall Paper Company has established a number of branches which sell paints and wallpaper to the public. Most of the merchandise handled by the branches is purchased from the home office at regular retail prices which are maintained uniformly for all merchandise, including outside purchases at 25 per cent above the actual cost to the company. Outside purchases made by branches and inventories thereof are carried at retail on the branch books and the markup is credited to an income account. A check to cover such purchases is sent periodically to each branch. Bank balances of branches, except for an amount estimated to cover immediate expenses, are remitted to the home office at the beginning of each month. The accounts of each branch are audited annually.

During the fiscal year ended June 30, 1943, remittances from one of the retail branches to the home office were irregular, and suspicion arose as to the correctness of the monthly reports submitted by the branch manager. The president of the company decides to have an immediate audit made of this branch, and on July 1, 1943, you are called upon to make an investigation. The following information is made available to you:

On the home-office books, the account of the branch was as follows:

Particulars		Amount
Balance—July 1, 1942		\$ 62,501.63
Merchandise shipments at branch selling prices		128.125.00 7,750.00
cluding purchases for the month of June, 1943, \$3.125.00)		41,975.00
_		\$240,351.63
Receipts from branch	\$127,218.13	
June 30, 1943, and write-off approved	1.219.12	128.437.25
Balance—June 30, 1943		\$111.914.38

An audited trial balance of the branch at July 1, 1942, consisted of the following items:

Particulars	Amount
Cash—from June, 1942, receipts	\$14,962.63 16,227.08 17,148.29 21,915.00
Accounts payable—	\$70,253.00
Rent.       \$ 826.22         Outside purchases.       6,925.15	7,751.37
Balance—June 30, 1942	\$62,501.63

Upon examination, you find that during the fiscal year the monthly purchases from outside concerns as reported to the home office were correct, that the amounts received from the home office were not all applied to the payment of these accounts, and that as at June 30, 1943, the total accounts payable amounted to \$12,525.08. Cash on hand and in the local bank at June 30, 1943, was \$1,916.22. A list of the collectible accounts receivable at June 30, 1943, verified by you (less the items allowed as bad debts which you find to be correct) totalled \$19,526.11. Salaries and wages were fully paid by the manager to June 30, 1943, and for the year amounted to \$24,-908.15. The monthly rental of the store was based upon 5 per cent of net sales, and you find that since July 1, 1942, the manager has paid a total of \$8,555.01 to the lessor, payment for any one month being made at the beginning of the month following. An inventory at June 30, 1943, taken under your supervision and valued at selling price, was \$15,226.19. The experience of the company relative to returns and allowances on merchandise sold has been that 5 per cent approximates very closely the loss of each branch. No equipment purchases were made by the branch from outside sources during the year. No depreciation is recorded except on the books of the home office.

From the above facts, prepare a trial balance of the branch office before closing, showing thereon the shortage of the manager, if any, and append to the trial balance your computations.

## PROBLEM 73

## BANK REORGANIZATION

Following a failure in March, 1943, The Builders State Bank reorganized. Capital was procured from wholly new

stockholders and the institution was renamed The Builders Bank and Trust Company. Under contract, the old bank sold all its assets to the new company which, in turn, assumed all the obligations of its predecessor. With the exception of fixtures and equipment, and United States government securities which were to be taken over at net book values and market, respectively, and certain other items which had a definite market value, the contract did not fix transfer values of assets. It was stipulated, however, that any excess realized in the liquidation of these unvalued assets over the amount of the net liabilities assumed should be turned back to the old bank for distribution to the old stockholders. The new bank was given unrestricted title to the assets, with unlimited power to dispose of them as its officers deemed best. The obligation of the old bank to the new was credited with the values of fixtures, Federal securities, cash, and such loans and other securities as were considered unquestionably sound. As the market values of other assets rose to levels equal to their value on the books of the old bank, the new bank took them up and credited the obligation of the old bank with the current market plus accrued interest to the date of the book transfer. From the date of reorganization to July 31, all income received from securities which had not been so transferred to the books of the new bank was credited to the obligation of the old bank and treated as income of the old organization.

It has been pointed out that, since the terms of the contract gave the new bank title and possession of the assets of the old bank, income from such assets, regardless of whether or not such assets are reflected on the books of the new organization, should be shown as taxable income of the new bank. The officers defend their procedure by stating that the bank examiner refused to let them take certain assets on their books and they had deferred the time of transferring others until market values rose to a point where a minimum loss would be incurred by the old bank. Which position would you defend? Why?

## PROBLEM 74 APPLICATION OF FUNDS

From the accompanying comparative balance sheet, prepare a statement of application of funds for the year ending July 31, 1943:

#### ARTHUR CORPORATION

#### Comparative Balance Sheets

Fiscal Years Ending July 31, 1942 and 1943

	July 31		
Assets	1942	1943	
Cash on hand and in banks	\$ 63,429.48	\$ 32,699.40	
Notes receivable	10,300.00	12,460.00	
Trade accounts receivable	314,098.67	318,270.48	
Inventories—	•	•	
Raw material	43,290.74	23,980.67	
Work in process	15,840.62	9,479.82	
Finished goods	75.390.84	46,249.29	
Prepaid expenses	9,240.00	6,480.00	
Treasury stock—250 shares, at cost		38,200.00	
Land	120,000.00	120,000.00	
Buildings	\$47,000.00	630,000.00	
Reserve for depreciation	496,240.84*	385,690.74*	
Machinery and equipment	430,290.00	410,380.72	
Reserve for depreciation	298,460.70*	284,943.61*	
Total	\$1,134,178.81	\$977,566.03	
Liabilities and Net Worth			
Accounts payable	\$ 196,340.82	\$273,560.90	
Notes payable	52,500.00	46,000.00	
Accrued expense	4,390.00	8.9 <del>1</del> 6.70	
Notes receivable discounted	•	10,300.00	
Loans from officer		20,000.00	
6% First mortgage bonds	150,000.00	100,000.00	
Capital stock-1,000 shares, \$100.00 par,	-	-	
authorized	350,000.00	380,000.00	
Capital surplus	409,050.10	274,100.20	
Earned surplus	28.102.11*	135.341.77*	
Total	\$1,134.178.81	\$977,566.03	

\*Red.

The following points are to be considered:

- (1) The building account was shown at appraised values on July 31, 1942, but was written down on August 1, 1942, to its original cost, on which 5 per cent depreciation was taken during the year ending July 31, 1943.
- (2) Machinery costing \$68.390.00, on which depreciation of \$54,555.16 had been accumulated, was sold for \$5,500.00.
- (3) Mortgage holders received \$20,000.00 plus accrued interest in cash and \$30,000.00 in capital stock for bonds maturing during the fiscal year ending July 31, 1943.
- (4) The only other change in capital surplus arose from a loss from a merchandise speculation which was charged thereto.

(5) The "loans from officer" represents the undrawn salary of the president for the past year.

#### PROBLEM 75

## GOODWILL FROM CONSOLIDATION

You are called upon to compute goodwill arising from the consolidation of the balance sheets of 3 companies and the consolidated net profit or loss for the calendar year 1946.

Companies N, O, and P are affiliated in the following manner:

- (a) P purchased a 70 per cent interest in O on January 1, 1945, at a cost of \$1.000,000.00.
- (b) N purchased a 10 per cent interest in O on January 1, 1946, at a cost of \$150,000.00.
- (c) N purchased an 80 per cent interest in P on the same date at a cost of \$1,400,000.00.

The net worths of the three corporations follow:

$\underline{N}$	<u>o</u>	<u>P</u>
\$3,300,000.00	\$1,000,000.00	\$1,500,000.00
200,000.00		•
	250,000.00	
500,000.00	100.000.00*	400,000.00
100,000.00	50.000.00*	100,000.00*
300,000,000	150,000.00*	70,000.00*
\$4,400,000.00	\$ 950,000.00	\$1,730,000.00
	\$3,300,000.00 200,000.00 500,000.00 100,000.00 300,000.00	\$3,300,000.00 \$1,000,000.00 200,000.00 \$1,000,000.00 250,000.00 \$100.000.00* 100,000.00 \$50,000.00* 300,000.00 \$150,000.00*

<sup>\*</sup> Red.

No dividends have been paid during the periods appearing in the above analysis.

O Company has purchased merchandise for resale from N and P Companies for many years. At the various dates, the intercompany profits involved in O's inventories were:

	Purchased from			
Date	$\overline{\overline{\lambda}}$	<u>P</u>		
Jan. 1, 1945	\$10,000.00	\$ 5,000.00		
Dec. 31, 1945	20,000.00	10.000.00		
Dec. 31, 1946,	00.000.9	11.060.00		

## COMPUTATION OF BOND DISCOUNT

The Apex Mills floated a bond issue of \$25,000.00 on January 1, 1941. The provisions of the trust agreement state that \$5,000.00 is to be retired annually, beginning one year from the date of issue, on the interest date, January 1. The bond discount and expense of the issue, \$1,960.87, is to be amortized over the 5-year period on the calendar-year, bonds outstanding basis.

On June 30, 1943, bonds totaling \$3,800.00 were purchased by the company at par plus accrued interest, with maturity dates as follows:

Date Due	Amount
Jan. 1, 1944	\$1,500.00
Jan. 1, 1946	300.00
Jan. 1, 1945	2,000.00
	\$3,800.00
	\$6,000.00

Of the bonds repurchased, those having the due date of January 1, 1945, were resold September 1, 1943, at 80.

Compute the discount and expense chargeable to the calendar year 1943.

#### PROBLEM 77

## PARTNERSHIP LIQUIDATION

A partnership comprised of A, B, and C has decided to liquidate its business because of declining profits. The partners ask you to prepare a balance sheet of the partnership at December 31, 1946, and to devise a schedule showing the proper distribution of the available cash to creditors and partners. The following facts are made available to you:

The partnership agreement calls for the distribution of

profits as follows:

A								20%
								40%
<i>C</i>								40%

A, as manager, is entitled to an annual salary of \$10,000.00 plus 20 per cent of the profits before interest allowances but after the salary deduction. The bonus has not yet been given expression to on the books. Interest at the rate of 6 per cent

per annum is to be allowed on average invested capital during the year 1946, without regard, however, to the current year's profits or losses. None of the partners has private resources that may be drawn on in the event of a deficiency.

A trial balance of the company's books at December 31,

1946, was as follows:

·		Balance
	Decembe	r 31, 1946
	Dr.	Cr.
Cash		
Accounts receivable (considered collectible)	175,000.00	
Inventory—December 31, 1946	55,000.00	
Land and building (less reserve)	425,000.00	
Machinery and equipment (less reserve)	150,000.00	
Accounts payable		\$ 30,000.00
6% mortgage on land and building, ma-		
turing August 1, 1947 (interest paid to		
January 1, 1947)		100,000.00
A—Salary account		5,000.00
B—Loan (interest paid in full to January		
1, 1947)		20,000.00
B—Withdrawals	10,000.00	
C—Withdrawals	35,000.00	
A—Capital		270,000.00
B—Capital		375,000.00
C—Capital		325,000.00
Sales		1,500,000.00
Cost of sales	1,250,000.00	
Partner's salary	10,000.00	
Other expenses	190,000.00	
	\$2,625.000.00	\$2,625,000.00

The partners accepted the plan of distribution presented by you, and, on January 10, 1947, made the distribution called for by your statement. A was appointed to take charge of liquidating the business at an annual salary of \$6,000.00. You are requested to make up distribution statements for each 3 months until the business is liquidated, so that the receipts may be disbursed promptly.

The liquidation of the business by A resulted in the following cash collections for two 3-month periods:

On accounts receivable—

January 1-March 31	\$50,000.00
April 1–June 30	
•	

Machinery and equipment sold, at book value-

January 1–March 31	\$35,000.00
April 1–June 30	25,000.00

On March 1, 1947, B offers to purchase the land and building at a valuation of \$350,000.00, and to assume the mortgage and the interest payments thereon. A and C immediately accept the offer. Because of the probability of a deficit in B's remainder interest, B on the same date gave to the partnership a \$30,000.00 second mortgage on the land and building in complete and final settlement of his account.

On March 20, 1947, as a separate transaction, A agreed with C to accept the junior mortgage as a distribution to his account at a discount of 20 per cent.

The entire inventory was sold for cash on March 25, 1947, at book value.

From the above information, prepare the statements asked for by the partners giving effect to the above transactions and to the quarterly distributions. The final distribution was made on June 30, 1947, the assets remaining unliquidated at that time having no value.

### PROBLEM 78

## STATEMENT OF COST OF SALES

You are asked to prepare a schedule of the cost of sales of a certain company and the finished-product valuation at the end of an operating period. The details follow:

B.P.M. Chemical Corporation manufactures two products known as X and Y from raw materials S, T, and U. To produce 2 units (by weight) of X, one unit of S and 2 units of T are required; to produce 8 units of Y, 3 units of S, 6 of T, and 1 of U are necessary. The single by-product in each case is a different compound to which the component raw materials contribute proportionately. Ten per cent by weight each of materials S and T escapes in the form of a nonutilizable gas in a heating operation before entering each of the two processes, and the component weight units indicated above do not include the weight of this gas.

Inventories and purchases of raw materials and finished products by weight in tons follow. There is no work in process at the end of a fiscal year.

Material or	Inventorie	Purchases During	
Product	1945	1946	Year Year
S	. 3,000	2,500	21,500
$T.\dots\dots\dots\dots$	4,000	15,000	55,000
$U\ldots\ldots\ldots\ldots$	2,400	1,000	2,500
Σ	. 2,000	1.000	•
Y	1,000	10,000	

Raw-material market prices for material S at June 30, 1945, which approximated actual cost, averaged \$35 a ton; purchases during the year were made at \$40 a ton. The average market price at June 30, 1946, was \$32 a ton. Materials T and U have had a fixed market (and purchase) price for the last two years: \$150 and \$60, respectively. At June 30, 1945, these market prices were the basis of the inventory valuation. The raw material at the beginning of the fiscal year may be considered as having entered into the production of product X, since no runs were made for product Y until after January 1, 1946.

Product X was valued in the inventory of June 30, 1945, at cost, which was then lower than market, of \$208 per ton. Product Y at that time had a market price of \$150 per ton, which was lower than cost. For the purpose of computing the balance-sheet value of the inventory of both finished products at June 30, 1946, you have been instructed to adopt the basis of cost of production, which you find approximates the quoted prices of the two products.

Manufacturing costs applicable to the two products were:

	Product					
<u>Item</u>	$\overline{X}$	<u> 7.</u>				
Labor	\$400,000.00	\$372,000.00				
Factory overhead		288,000.00				

All the by-products produced during the year were sold, as follows: by-product from X, \$9,000.00; by-product from Y, \$10,000.00.

What effect would be had on the June 30, 1946 inventories of products X and Y if you had regarded the \$8 decline in the market value of material S as an addition to production costs of both products?

## CONSOLIDATED BALANCE SHEET

Mono Arts, Inc., is a manufacturing company which is controlled or owned from their inception two subsidiary companies known as Duo Arts, Inc., and Trio Arts, Inc. You asked to prepare a consolidated balance sheet (supported by work sheet) of the three companies showing therein the consolidated net profit for the year.

The respective balance sheets of the three companies December 51, 1945, were:

Assets	Mono Arts, Inc.	Duo Arts, Inc.	Trio Arts, Inc
Cash	\$ 38,365.81 385,772.46	\$ 5,440.51 95,980.01	\$ 103,859.7 163,343.4
Inventories, at cost which is lower than market	842,443.43		656,658.0
Duo Arts, Inc., 10,000 shares	418,172.97		
Trio Arts, Inc., 25,000 shares Plant, net	1,250,000.00	391,983.75	768,453.2
Total	\$2,934,754.67	\$493,404.27	\$1,692,314.4
Liabilities  Vouchers payable	\$ 186,441.25 2,332,105.10		\$ 275,945.8
Capital stock, 10,000 shares Capital stock, 30,000 shares Paid-in surplus, from sales of do-		\$400,000.00	1,500,000.0
nated stock			300,000.0
Earned surplus— Balance January 1, 1945 Net profit for 1945	354,363.04 61,845.28	90,864.87 2,539.40	335,468.9 48,162.3
Total	\$2,934,754.67	\$493,404.27	\$1,692,314.4

<sup>\*</sup> Red.

At January 1, 1945, Mono Arts, Inc., owned 8,000 share of Duo Arts, Inc., which it had acquired at the origin of the company at a cost of \$320,000.00. During 1945, it purchases at book value, as of January 1, 1945, the remaining 2,00 shares from the estate of a deceased officer, in accordance with the terms of a certain contract. As at December 31, 1946 Mono Arts, Inc., had entered into an agreement with a ne executive of Duo Arts, Inc., for the sale of 1,000 shares (contracts).

the 2,000 shares acquired during the year) of the latter's capital stock at par in exchange for the executive's 6-month note, although the entry covering the transaction has not yet been spread on the records.

The plant (land, buildings, and equipment) owned by Trio Arts, Inc., was acquired on January 1, 1942, from Mono Arts, Inc., on the basis of a wholly arbitrary valuation for both assets and reserve for depreciation pertaining thereto equal exactly to 50 per cent more than the actual cost of the assets and the accumulated reserve on the books of Mono Arts, Inc.; on the books of the latter company, the write-up was credited to earned surplus. Since that date, the transactions affecting plant, including depreciation which has been computed on the basis of percentage rates believed to be fair, have been as follows:

<u>Particulars</u>	Land, Buildings, and Equipment	Reserve for Depreciation
January 1, 1942 value	\$1,353,814.41	\$357,618.15
Depreciation, 1942		37,439.82
Depreciation, 1943		42,647.13
Retirements in 1943, sold for \$10,500.00	73,497.81*	28,329.72*
Depreciation, 1944		44,935.23
Depreciation, 1945		43,561.44
Retirements in 1945, sold for \$2,400.00	23,468.88*	9,477.57*
Totals	\$1,256,847.72	\$488.394.48

<sup>\*</sup> Red.

On the books of Duo Arts, Inc., land, buildings, and equipment appear at cost of \$553,465.82 less accrued depreciation of \$161,482.07.

The inventory cost of Trio Arts, Inc., contained depreciation which had been included in cost of production, amounting at the beginning and the end of the year to \$3,425.40 and \$5,869.35, respectively. These same inventories contained items of \$47,348.29 and \$30,854.78, respectively, representing purchases from Mono Arts, Inc., which had been billed to Trio Arts, Inc., at cost plus 10 per cent, which approximated market.

The customers' receivables and the vouchers payable shown above include (a) a loan of Trio Arts, Inc., made during the year to Mono Arts, Inc., of \$100,000.00 and (b) accrued interest thereon of \$3,437.19.

There have been no changes in the issued capital-stock accounts since the incorporation of the three companies.

## PROBLEM 80

## Analysis of Accounts for Shortage

The bookkeeper-cashier of Borgia Industries, Inc., absconded, on the evening of March 28, 1944, apparently with a large portion of the company's cash, and has taken with him certain accounting records, including the cashbook and the general ledger. You are called upon to ascertain, if possible, the shortage with which the missing employee may be charged. The shortage may be recoverable through insurance.

From available subsidiary journals and ledgers and other data, you obtain the following information:

Balances at close of business, March 28, 1944—	
Customers' accounts	
Merchandise creditors	20,730.27
Other debtors or creditors	None
Cash in bank, less checks outstanding	9,883.43
Transactions January 1-March 28, 1944-	
Sales, per receivables' clerk	587,617.48
Cash sales	None
Sales allowances in customers' accounts	1,833.63
Cash purchase of furniture, per invoice	300.00
Depreciation provision—3 months	190.16
Merchandise purchase record total	361,526.42
Expenses paid, supported by vouchers and payrolls	186,583.68
Cash dividend declared, \$5,000.00, of which \$1,000.00	
remains unpaid	4,000.00
Changes in capital stock	None

Cash credits to customers' accounts during January, February, and March amounted to \$4,383.42 more than the total deposits reported on the bank statements for those months.

A balance sheet prepared from the books at December 31, 1943, and discovered in the files, follows:

Assets		_	Liabilities	
Cash Customers Fixtures (cost) Inventory (cost)	22,623.45 7,456.26	•	Merchandise creditors Reserve for depreciation Capital stock Earned surplus	3,180.42 50,000.00
Total assets	\$77,382.98		Total liabilities	\$77,382.98

A check for \$7,500.00 had been cashed by the bookkeeper shortly before his departure. Although the signatures on the check had been obviously forged, it was paid by the bank and returned with other canceled checks.

In addition to obtaining the amount of the possible shortage, you are asked to prepare a balance sheet and operating statement for the period ending March 28, 1944. The merchandise inventory at that date has been estimated as having a cost of \$38,871.04, which is less than market.

## PROBLEM 81

## APPLICATION OF FUNDS

From the information appearing hereinunder, prepare (a) a working balance sheet of the Beilfuss Corporation at December 31, 1944, and (b) a statement of application of funds for the year 1945.

The balance sheet of the Beilfuss Corporation appeared as follows at December 31, 1945:

Assets			
Current assets—			
Cash in banks and on hand		\$ 19,867.24	
Due from customers—			
Notes         \$11           Accounts         23			
Total receivables \$35	5.618.59		
Less—			
Notes receivable dis-			
counted \$57,312,66 Reserve for bad debts 44,386,57 10	1.699.23	253,919.36	
110011111011011111111111111111111111111		200112100	
Inventory of materials, work in progress and finished product		91,468.83	\$365,255.43
Deferred charges and prepaid expenses—			
Unamortized bond discount and ex-			
pense		\$ 3,274.45	
Other deferred charges and prepaid			
expenses		7,112.92	10.387.37
I and building machiness etc		\$782,456,77	
Land, buildings, machinery, etc  Less—Reserve for depreciation		298.466.71	483,990.03
mess account for defectation			
Total assets			\$\$59,632.86
***************************************			=======================================

## Liabilities and Net Worth

Liabilities and Net World	L	
Current liabilities— Bank loans	\$ 95,000.00 45,687.53 22,347.41	\$163,034.94
6% First mortgage bonds		150,000.00
Net worth—		200,000100
Preferred stock: authorized and issued, 2,000 shares of \$100 par value \$200,000.00 Common stock: authorized and out- standing, 2,500 shares of \$100 par		
value	\$450,000.00	
Earned surplus—  Balance January 1,  1945\$45,444.87  Net profit for year ended December 31, 194594,403.05 \$139,847.92  Less—Dividends on preferred and		
common stocks	116,597.92	
	<del></del>	
	\$566,597.92	
Less—Cost of 250 shares of reacquired preferred stock held in treasury	20,000.00	546,597.92
Total liabilities and net worth.		\$859,632.86

Following are the items appearing in the statement of profit and loss for 1945:

Account	$\underline{\mathbf{Debit}}$	$\underline{\mathbf{Credit}}$
Account  Net sales. Inventory January 1, 1945. \$ Purchases. Inventory December 31, 1945. Direct labor. Factory depreciation. Other factory overhead. Decrease in inventories of work in process and finished stock. Depreciation on salesmen's automobiles. Other selling expense. Administrative salaries. Depreciation of office fixtures.	<del></del>	Credit \$1,740,346.21 54,619.83
Bad debts	41,648.36	
Other administrative expenses.  Miscellaneous income (net)  Discounts received  Profit on sale of reacquired bonds	68,372.48	1,842.69 5,440.05 1,500.00

Profit on sale of fixed assets		328.99
Bond discount and expense		
Discounts allowed	8,618.37	
Net profit	94.403.05	

The cash books for the year ended December 31, 1945, were summarized as follows:

Cash receipts— Collections on— Accounts receivable\$1,053,920.16 Notes receivable	\$1,548,868.15	
Proceeds, representing face value, of discounted notes receivable.  Bank loans.  Cash sales.  Sale of common stock, at par.  Sale of \$15,000.00 of reacquired bonds.  Bad-debt recoveries.  Sale of machinery and equipment, of a gross book value of \$11,133.90.  Interest collections.	474,396.20 395,000.00 41,310.26 50,000.00 13,500.00 1,215.04 2,950.00 6,673.47	
Less—Discounts allowed to customers	\$2,533,913.12 6,219.07	\$2,527,694.05
Cash disbursements— Payment of all following liabilities at January 1, 1945— Accounts payable\$10,348.17 Accrued liabilities	<b>\$</b> 28,979.63	
Payments to banks on notes receivable discounted	521,610.94 300,000.00 133,705.24 12,000.00 23,250.00 1,512,364.94	
Less—Discounts received	\$2,531,910.75 5,440.05	2,526,470.70
Increase in eash in banks and on hand		\$ 1,223.35

In addition to cash collections on customers' accounts receivable, a further liquidation in the accounts receivable of \$521,525.23 was represented by (a) the receipt of notes receivable, after deducting allowable discounts of \$2,399.30, and (b) acquisition at \$0 of \$25,000.00 of treasury preferred stock.

Dividends payable January 2, 1947: Preferred stock	414,129.25 25,000,000.00
Authorized 750,000 shares Issued and outstanding 539,500 shares at paid-in value	42,343,942.00
	\$\$\$,5\$\$,771.25
Summary of Surplus Accounts for the Period from January  December 31, 1946  Paid-in Surplus  Consideration received for common stock in excess of \$5.00 per share allocated to surplus by directors—January 4, 1944  Surplus arising from reduction of preferred capital:	1, 1944, to \$7,500,000.00
Paid-in value of 60,500 shares retired—       \$3,025,000.00         July 15, 1946	575,000.00
Less—1946 dividends:	\$8,075,000.00
Cash dividends on preferred stock for 6 months ended December 31, 1946, per resolutions of directors	809,250.00
Balance—December 31, 1946.	\$7,265,750.00
Earned Surplus           Particulars         1944         1945           Net income         \$2,212,696.25         \$1,935,000.00	1946 \$ 965,000.00
Deduct—dividends paid: Preferred stock (paid in cash) \$1,800,000.00 \$1,800,000.00 Common stock (paid in common stock at \$5.00 per share) 37,570.50 37,758.50	\$ 900,000.00
Total dividends \$1,837,570.50 \$1,837,758.50	\$ 937,946.50
Net change in surplus \$ 375,125.75 \$ 97,241.50	\$ 27,053.50

Surplus—beginning of year		375,125.75	472,367.25
Surplus—end of year	. \$ 375,125.75	\$ 472,367.25	\$ 499,420,75
Summa	ry of Income Ac	counts	. —
Particulars	1944	1945	1946
Income:  Cash dividends and interest received  Stock dividends taken up at market value at date of re-	\$2,035,696.25	\$2,143,000.00	*\$1,954,000.00
ceipt	1,580,000.00	1,420,000.00	1,200,000.00
stock rights	620,000.00	600,000.00	550,000.00
ities Profits on syndicates closed	22,000.00 120,000.00	20,000.00 247,000.00	50,000.00* 104,000.00*
Total incomeGeneral expenses		\$4.430.000.00 235,000,00	\$3,550,000.00
Net income available for interest charges		\$4,195,000.00	\$3,350,000.00
Interest paid: 6% gold debentures Bank loans and miscellaneous	\$1,475,000.00 450,000.00	\$1,500,000.00	\$1,500.000.00 \$\$5,000.00
Total interest paid	\$1,925.000.00	\$2,260,000.00	\$2,385,000.00
Net income	\$2,212,696,25	\$1,935,000.00	\$ 965,000.00

<sup>\*</sup> Red.

#### DISTRIBUTION OF PROFITS

A, B, and C possess the working interest, or seven-eighths of the total interest, in a mining venture, a royalty of one-eighth of the gross proceeds going to D, the owner of the property. From the working interest must be paid an overriding royalty to E of three-sixteenths of the gross proceeds belonging to the working interest. The net monthly proceeds from the sale of ore, after deducting royalties and expenses, are to be distributed to the owners of the working interest.

A's share is to consist of:

1/16 of the working interest (a) before deducting the overriding royalty to E, and (b) before deducting expenses: plus

1/7 of the working interest (a) after deducting the overriding royalty to E, and (b) after deducting expenses not in excess of \$7,000.00. B and C are to share equally any net proceeds remaining. You are informed that monthly expenses will always exceed \$7,000.00. For January, sales of ore (gross proceeds) were \$18,688.00, while expenses were \$7,427.56.

You are required to compute the distribution for January and to devise fractions or formulas that may be applied to the gross proceeds in succeeding months for the purpose of determining the division between the various parties at interest.

rchase term.

## PROBLEM 84

COMPUTATION OF INTEREST RATE

A purchase of machinery amounting to \$27,900.00 is being contemplated by Monak Manufacturing Company. You have been asked to compute the cost to the purchaser, in terms of the average rate of simple interest, of financing the purchase on the installment plan, under the terms of which one-third is to be paid down in cash and the balance is to be paid in 12 equal monthly installments, beginning 1 month from the date of sale; to each installment is to be added (a) interest at 6 per cent per annum on the installment of principal paid, and (b) 10 per cent of the principal paid as a finance charge.

## PROBLEM 85

## INVENTORY VALUATION

XYZ Company manufactures a mechanical device consisting of stamped metal parts, parts finished on automatic machines, and parts purchased from outside vendors. The three classes of parts are brought together in an assembly department.

You have been called upon by the company to compute the inventory valuations. After beginning your work, you learn that the company sold quantities of certain parts to a manufacturer of a noncompetitive machine. The quantities sold were on a flat contract basis of \$80,000.00 for the lot. All parts sold on contract had been delivered at the date of your examination.

You are asked to prepare a cost-of-sales statement in sufficient detail to enable the officials of the company to visualize the cost reductions effected by making further contracts for parts sales.

No inventories were on hand at the beginning of the year. Summaries of departmental overhead, and production and cost data follow:

Departmental (	Overhead	for Year:
----------------	----------	-----------

Punch-press department	\$114,400.00
Automatic department	183,600.00
Assembly department	110,000.00

Total overhead.......... \$408,000.00

#### Production Data:

## Punch-Press Department

Part Number	Produced	Sold	To Assembly	Ending Inventory	Number in Each Machine
1	160,000			<del></del>	1
1	160,000	20,000	80,000	60,000	1
$2\dots$	140,000	40,000	80,000	20,000	1
3	120,000	30,000	80,000	10,000	1
7	150,000	30,000	80,000	40.000	1
$5,\ldots$	190,000	30,000	80,000	80,000	1
	======			<del></del>	
		Automat	ic Departmen	<u>t</u>	
6	000,000		240,000	60,000	3
7	520,000	200,000	240,000	000,08	3
8	000,000	•	240,000	60,000	3
$9.\dots$	600,000	100,000	480,000	20,000	6
10	520,000	200,000	240,000	80,000	3

#### Cost Data:

Part Number	Labor Cost Each	Material Cost Each
1	\$.05	\$.10
9		.10
3		.08
4		.05
5		.03
6, , , , , , , , , , , ,		.05
7		.05
8		.04
9		.03
10		.03
	<del></del>	

Ninety thousand sets of purchased parts cost \$5.50 a set, one set being necessary to produce a single machine.

Parts were delivered from the punch-press and automatic departments to the assembly room, where assembly work be-

gan immediately. The assembly room completed the assembly of 60,000 machines at an average assembly labor cost of \$1.60 each, and spent an average of \$.70 labor each on 20,000 partially finished machines. Fifty thousand machines were delivered to customers. It is assumed that no loss was incurred from the spoilage or loss of parts.

You find that the foregoing data is the only dependable data available for your use and that within each department overhead may best be prorated on the basis of direct labor cost.

#### PROBLEM 86

## BUILD-UP OF ACCOUNTS

From the information following, prepare as at December 31, 1946, a working trial balance, statement of profit and loss, and balance sheet of the Mortgage Corporation.

On January 1, 1946, the Mortgage Corporation was established under the laws of the State of New York with an authorized and paid-in capital of \$50,000.00, consisting of 10,000 shares of no-par value. On the same date, it entered into an agreement with the Realty Corporation, a New York corporation engaged in the developing of a suburban tract of land, whereby purchase-money mortgages acquired by the Realty Corporation were to be sold to the Mortgage Corporation in exchange for cash equal to (a) 75 per cent of the face value of the mortgages, plus (b) accrued interest. The contracts, which matured within 3 or 4 years, were guaranteed both as to principal and interest by the Realty Corporation.

The Mortgage Corporation on January 2, 1946, laid plans for an issue of 6 per cent collateral-trust bonds in the amount of \$400,000.00 with the First Trust Company, as trustee, maturing as follows: \$150,000.00 on December 31, 1946; \$150,000.00 on December 31, 1947; \$100,000.00 on December 31, 1948; interest payable June 30 and December 31. As the mortgages were received from the Realty Corporation, they were to be deposited with the trustee, who would thereupon issue to the Mortgage Corporation bonds not in excess of 80 per cent of the aggregate unpaid principal of the mortgages. The bond indenture provided that principal and interest collected on the mortgages were to be turned over to the trustee who would create separate funds therefor and pay therefrom

the principal and interest, respectively, of the bonds. Arrangements were made with bankers to dispose of the bonds, as issued, to net the Mortgage Corporation 90 plus accrued interest; interest accrued at the date of issue was to be paid into the interest fund by the trustee and deducted from the proceeds paid to the Mortgage Corporation.

On the following dates the Realty Corporation delivered to the Mortgage Corporation, which in turn reassigned and delivered over to the trustee, the following mortgages:

		Interest	Bonds
	Aggregate	Accrued on	Delivered
$\underline{ ext{Date}}$	Mortgages	Mortgages	by Trustee
January 2	\$120,000.00	\$485.49	\$96,000.00
February 1	90,000.00	112.\$2	72,000.00
March 1	115,000.00	301.00	92,000.00
April 1	105,000.00	231.86	\$4,000.00

On May 1, the Realty Corporation tendered to the Mortgage Corporation mortgages aggregating \$25,000.00 with interest accrued of \$106.40, but on this date the trustee reported that mortgages in its possession in the principal amount of \$17,500.00 with accrued interest of \$418.19 were in default. The Realty Corporation agreed, therefore, to take back from the trustee these delinquent mortgages, pay the accrued interest, and in place deliver other mortgages, the net result of this transaction being the acquisition of \$7,500.00 in additional mortgages by the trustee. The Mortgage Corporation paid the trustee the \$418.19 in accrued interest, and in turn deducted this amount from the payment due to the Realty Corporation. The trustee delivered \$6,000.00 in bonds, which were discounted in the usual manner.

On June 1, the Realty Corporation tendered the Mortgage Corporation mortgages aggregating \$68,500.00 plus accrued interest of \$468.88, but an examination of the details revealed that installments of principal and interest on some of the mortgages were unpaid. The arrears amounted to \$13,750.00 in principal and \$326.75 in interest. In order to complete the transaction, however, it was mutually agreed that these mortgages should be purchased for a face amount of \$54,750.00 plus the interest not in default; and when collections by the trustee amounted to such face amount, the remaining

balance would be returned to the Realty Corporation. At the consummation of this transaction, the trustee delivered to the Mortgage Corporation bonds amounting to \$44,000.00.

On June 30, the Mortgage Corporation paid to the trustee \$657.38 to cover a deficit existing in the interest fund, thereby enabling the trustee to pay the semiannual interest out of this fund.

On June 30, after the payment of interest, the Mortgage Corporation paid the trustee \$6,000.00 and received the remaining bonds (due December 31, 1948) held by the trustee.

On September 2, the Mortgage Corporation borrowed from the First Trust Company \$10,000.00 on its 4 months' note and pledged thereon the \$6,000.00 in bonds. The proceeds amounted to \$9,800.00.

On December 31, the Mortgage Corporation paid \$218.81 to the trustee, the amount necessary to enable the trustee to retire the bonds maturing on that date.

At the end of the year, the trustee reported the following credits to the fund accounts:

Particulars	Principal Amortization Fund	Interest Fund
Collections from mortgagors during the year.		\$19,936.19
Deduction for interest accrued on bonds delivered—	-	
February 1		360.00
March 1	•	920.00
April 1	•	1,260.00
May 1	•	120.00
June 1	•	1,100.00
June 30 (bonds undelivered)	•	180.00
Received from Mortgage Corporation of	2 000 00	410 10
June 30, 1946	6,000.00	$418.19 \\ 657.38$
Interest earned on balances in fund during	•	007.00
the year		677.29
Received from Mortgage Corporation or	. 2,001.01	0,1,20
December 31 to redeem bonds	218.81	
	0.170.000.00	005 000 05
<b>6</b> 1	\$150,000.00	\$25,629.05
Charges to the accounts— Interest due June 30		\$12,000.00
Interest due December 31.	•	12,000.00
Redemption of bonds December 31	\$150,000,00	12,000.00
Balance in hands of trustee	φ190,000.00	1,629.05
•	\$150,000.00	\$25,629.05
		=======================================

The following expenses were paid in cash during the year: legal fees, \$5,000.00; organization expenses, \$2,000.00, to be written off in 1946; trustee's fees. \$5,000.00; miscellaneous, \$1,500.00. In connection with issuance of bonds, expenses paid were \$16,000.00. Directors' fees paid were \$500.00.

On December 31, the unpaid expenses were: trustee's fees, \$2,500.00; office rent. \$1,000.00; accounting fee, \$1,000.00; officers' salaries, \$25,000.00.

Interest earned on bank balances was \$148.59. Total interest accrued on mortgages at December 31 amounted to \$3,415.28, all of which should be regarded as earned. In addition to the defaults previously mentioned, mortgages in the principal amount of \$11,680.00, with interest accrued of \$315.11, being in default, foreclosure proceedings were commenced by the trustee.

## PROBLEM 87

## FOREIGN-EXCHANGE CONVERSIONS

The Federal Manufacturing Company has a wholly owned London subsidiary named the Clark Manufacturing Company, Limited, which sells certain products imported from the United States (purchased from the parent). It also processes and sells domestic products. Freight and duty average 65 per cent of the cost of the imported product.

The accompanying audited comparative balance sheets of the subsidiary at December 31, 1945 and 1946, with the income and surplus accounts for 1946, are submitted to you in connection with your audit of the parent company. You intend, of course, to consolidate the accounts, and are now called upon to state the two London balance sheets and the income and surplus accounts, for the year 1946, in terms of U. S. dollars.

## CLARK MANUFACTURING COMPANY, LIMITED Comparison of Balance Sheets—December 31, 1945 and 1946

•	December 31	
Assets	1945	1946
Current assets:		
Cash		
Customers' accounts receivable.	20.450	24.200
Less—Reserve for bad debts	2,000*	2,500*

<sup>\*</sup> Red.

<b>~</b>		
Inventories— Purchased in U.S. (including freight and duty). Purchased or manufactured in England Prepaid expenses Buildings, machinery, and equipment Less—Reserve for depreciation	8,950 12,200 1,400 20,800 4,500 <sup>4</sup> £62,500	11,450 24,805 1,200 24,300 6,355* £81,000
Liabilities		
Current liabilities: Accounts payable. Accrued expenses. Reserve for income tax. Due to parent company, payable in dollars. Net worth: Capital stock. Surplus.	£ 9,620 3,200 8,000 6,300 25,000 10,380	£ 8,400 3,000 10,000 10,300 25,000 24,300
outpids		24,000
	£62,500	£81,000
-		
* Red.		
CLARK MANUFACTURING COMPANY, 1	LIMITEL	)
Summary of Income and Surplus Accounts, Year Ende	d Decemi	ber 31, 1946
Income Account		
Net sales		£132.700
		<del></del>
Cost of sales: Goods purchased in U.S. (including freight and du Goods manufactured in England	ty)	£ 33,800 52,400
		£ 86,200
Gross profit	 g £2,255	£ 46,500
depreciation)		18,948
Net profit from operations		£ 27,552
Deduct: Loss on exchange remittances Provision for income tax		£ 2,352 1,000
		£ 3,352
•••		
Net profit	• • • • • • •	£ 24,200
Surplus Account		
Balance—beginning of year.  Net profit		£ 10,380 24,200

Total..... £ 34,580

Dividends paid	10,280
Balance—end of year	£ 24,300

The following supplementary information is secured:

The London company is required to carry all transactions involving dollars in its accounts at the old par rate of \$4.8665. The current account with the parent company is payable in dollars.

The capital-stock investment of the company appears on the books of the parent company at a cost of \$131,395.50. There was a surplus of the subsidiary at the date of acquisition, when exchange was at par, of £2,000. Dividends received during the year by the parent company aggregated \$31,148.40 after deducting the 25 per cent tax of the British Government withheld by the subsidiary.

Details of the intercompany account were as follows:

Intercompany Account (Credit Balance)	U.S. \$	$\underline{\mathfrak{z}}$
Balance—beginning of year.  Purchases during year.	\$ 30,659 107,063	£ 6.300 22,000
Remittances	\$137,722 \$7,597	£28,300 20,352
Loss on exchange required to adjust account to par	\$ 50,125	£ 7.948 2,352
Balance—end of year.	\$ 50,125	£10,300

The plant account and reserve for depreciation at December 31, 1945, converted at rates of exchange prevailing when the transactions therein took place, were as follows:

Asset account	\$95,680
Reserve for depreciation	20,700

1946 plant transactions are shown in the following schedules:

# Building, Machinery, and Equipment

Balance—beginning of year	
Additions (June, 1946)	4.000
Total	£24,800
Retirements (June, 1946) (acquired when exchange	
was at par in 1939)	500
Balance—end of year	£24.300

## Reserve for Depreciation

Balance—beginning of year	£	4,500 2,255
Total  Retirements (at cost less £100 salvage)		
Balance—end of year	£	6,355

The monthly profit-and-loss accounts were reported as follows:

		Cost of Sales		Net Profit from
Month	Net Sales	U. S. Goods	British	Operations
January	£ 10,500	£ 2,500	£ 5,000	£ 2,000
February	11,000	3,000	5,000	2,200
March	8,400	2,200	4,000	1,600
April	12,200	3,500	5,400	2,400
May	10,000	2,000	4,200	2,000
June	13,000	4,000	5,000	2,600
July	12,300	3,200	4,500	2,400
August	8,000	2,000	4,000	1,450
September	13,200	4,200	4,800	2,700
October	8,200	2,100	3,500	1,302
November	11,400	2,600	3,600	3,000
December	14,500	2,500	3,400	3,900
	<del></del>	<u>-</u>	<del></del>	<del></del>
	£132,700	£33,800	£52,400	£27,552

The following exchange quotations are ascertained from published records:

Former par rate	\$4.8665
Current rate at December 31, 1945	3.5540
Current rate at December 31, 1946	5.1550
Average monthly rates during 1946—	
January \$3.3614	
February 3.4221	
March 3.4328	
April 3.5793	
May 3.9324	
June 4.1356	
July 4.6499	
August 4.5026	
September 4.6647	
October 4.4683	
November 5.1497	
December 5 1159	

Note: The exchange rates appearing in this problem and the next were not the exchange rates actually in effect on the dates stated; they apply only to these problems, and may be regarded as indicative of rates prevailing in more normal times.

## PROBLEM 88

## FOREIGN-EXCHANGE CONVERSIONS

Blalock, Inc., an American manufacturing company, has a sales branch which it established in England as a wholly owned subsidiary corporation under the name of Blalock, Ltd. You have been engaged in auditing the books of the parent company and have agreed to accept an audit report of foreign accountants on the English subsidiary. This is the first audit of the parent company made by your firm, and the company's officials have evinced an interest in the effect on the financial statements you are preparing of the wide fluctuation during the year in pounds sterling. You are required to draft consolidated working papers on which appear opening consolidated surplus, properly adjusted for the decline in sterling quotations prior to 1946, and, generally, whatever adjustments that may be necessary in the preparation of consolidated financial statements and in the conversion of foreign items. Because of prior exchange losses, you have agreed that any 1946 income arising from the conversion of pounds sterling will be included in the statement of profit and loss for 1946 as an extraordinary item "below the line."

Following is a summary of your adjusted trial balances of the parent company at the beginning and end of the year under audit:

Accounts, Grouped	Dec. 31, 1945	Dec. 31, 1946
Cash	\$ 47.813.01	\$ 532,534.27
Customers	882,679.39	776,875.33
Merchandise inventory, at cost	2,152,446,14	2.144.816.46
Fixed assets	1.547.592.59	$1.5 \pm 7.59 \cdot 2.59$
Original investment in Blalock, Ltd	486.000.00	486,000.00
Current account—Blalock, Ltd	1,069,200.00	194,400.00
Cost of sales	3,196.500.00	3,744.000.00
Selling and administrative (less service		
charge to foreign branch)	1,659,068,57	1,724,359.38
Loss on exchange	3,654.00*	73,700.00
Cash dividend of 25° - July 1, 1946		1.000.000.00
Total debits	\$11,037,945,70	\$12,224,278.03
Trade creditors.	\$ 83,400.65	\$ 287,933.67
Reserve for depreciation	709,130,20	783.1¥4.08
Capital stock.	4,000,000.00	4,000,000.00
Earned surplus	917.414.85	1.393,200.28

<sup>\*</sup> Red.

Sales, at prevailing market prices— Outsiders Foreign branch		4,608,000.00 1,152,000.00
Total credits	\$11,037,945.70	\$12,224,278.03

You have recast the findings of the English accountants with respect to the foreign subsidiary thus:

Accounts, Grouped	Dec. 31, 1945	Dec. 31, 1946
Cash	£144,000 102,000	£ 44,000 150,000
December 31, 1945 (1945 purchases), sold in 1946 December 31, 1946 (1946 purchases) Fixed assets.  Purchases from parent company, 1946.  Service charge, parent company Depreciation, 1946, at 10%.  Other expenses.	120,000 25,000	120,000 36,000 35,000 288,000 12,000 3,000 30,000
Total debits	£391,000	£718,000
Trade creditors.  Due parent company.  Reserve for depreciation.  Capital stock issued to parent company at par.  Profit and loss (earned surplus).  Sales.  Unsold 1946 purchases.	£ 3,000 220,000 18,000 100,000 50,000	£ 21,000 40,000 21,000 100,000 50,000 450,000 36,000
Total credits.	£391,000	£718,000

Profits in excess of the profit-and-loss account of £50,000 (which had been earned in earlier years when the rate of exchange was \$4.86) are credited at the end of each year to the parent company's account, remittances being made from time to time as conditions warrant. The details of the intercompany account for the year 1946 were:

Particulars	Amount	
Balance, December 31, 1945	•	\$1,069,200.00
costs may be ignored)	288,000 12,000	1,152,000.00 48,000.00
Total debits	£520,000	\$2,269,200.00

Remittances—		
January 31	£120.000	\$ 408,000.00
March 31	100,000	342,000.00
August 31	150,000	678,000.00
November 30	110,000	573,100.00
Loss on exchange	•	73,700.00
Balance, December 31, 1946	<b>40,000</b> *	194,400.00
	<del></del>	
Total credits	£520,000	\$2,269,200.00
Total credits	£520.000	\$2,269.200.00

<sup>\*</sup>  $\overline{A}$  remittance of £67,000 was made to the parent company on February 1, 1947, \$338.350.00 having been realized therefrom.

You are told by the management that it has always been the practice to value the balance of the current account at the end of the year at the old par of exchange, and that during 1945 and 1946 an arbitrary rate of \$4 was used by the branch in converting charges from the parent company. These charges occur with more or less regularity throughout the year. The fixed assets owned by the branch at December 31, 1945, had been acquired when the rate of exchange was \$4.86; the additions during the year of £10,000 were purchased abroad on July 16, 1946.

Following are the rates of exchange which you have secured:

<u>Date</u>	Rate
December 31, 1945	\$3.30
July 16, 1946	4.20
December 31, 1946	5.10
1946 weighted average	4.10

## PROBLEM 89

## MUNICIPAL BALANCE SHEETS

The accounts of the City of Plainville are arranged in balanced fund groups. You are called upon to prepare from the information following a working trial balance and fund balance sheets of the city at June 30, 1944.

The ledger accounts of certain funds at July 1, 1943, were:

	General	Fund	
Dr.	<u>-</u>	<u>Cr</u>	
Cash	10,000.00	Accounts payable Notes payable Matured bonds and in-	500.00
Due from other funds	1,000.00	terest Surplus	

## Special Assessment Fund

Cash—for construction  Cash—for bonds and interest  Assessments receivable  Work in progress	2,000.00 10,000.00	Accounts payable. Contracts payable. Notes payable. Bonded debt. Due to other funds Appropriations. Reserve for rebates Surplus.	S,500.00 500.00
		Surpius	700.00

## Trust Fund

Expendable cash	\$	500.00	Expendable trusts—
Permanent cash		200.00	Pension funds \$15,000.00
Loans receivable		700.00	Permanent trusts—
Investments	77	,600.00	Endowments 30,000.00
		-	Revolving loan fund 1,000.00

## Transactions for the year ended June 30, 1944

- (1) When the annual budget was approved, it carried appropriations for general governmental purposes in the amount of \$100.000.00, including an item to offset estimated uncollectible taxes.
- (2) Revenues from miscellaneous sources were estimated at \$15,000.00.
- (3) Taxes were levied for the balance necessary to meet appropriation requirements, uncollectible taxes being estimated as 3 per cent.
- (4) Street and other improvements benefiting private property owners, estimated to cost \$50,000.00, were approved, and the necessary bonds were authorized and sold at par to provide money for construction purposes. Special assessments were also authorized to be levied against the property owners benefited.
- (5) Current taxes in the amount of \$78,000.00 were collected during the period, and taxes of prior years were collected in the amount of \$6,000.00.
- (6) Taxes were also levied amounting to \$10,000.00, to be collected and paid to other civil divisions.
- (7) During the year, an insolvent bank was closed in which there was \$2,000.00 of the city's general tax money on deposit.
- (8) Because of the slowness in general tax collections, \$3,-000.00 was borrowed from a bank, but was repaid during the period.
  - (9) A bequest of \$1,500.00 was received to be used as a

permanent revolving loan fund for the benefit of city employees.

- (10) Advances of \$2,500.00 were made from the general fund to start assessment improvements, of which \$2,000.00 was repaid during the period.
- (11) Cinders were sold to property owners for \$800.00, of which \$500.00 has been collected.
- (12) Miscellaneous revenues amounting to \$18,600.00 were received during the period, and special assessments were collected amounting to \$26,000.00, with interest of \$1,800.00.
- (13) The following miscellaneous amounts were also received during the period:
  - \$ 500.00 representing a contractor's deposit to guarantee the satisfactory completion of a contract.
    - 9,000.00 representing taxes levied for other civil divisions.
    - 1,200.00 representing expendable interest on endowment-fund investments.
    - 3,500.00 representing loan from bank pending sale of assessment improvement bonds.
  - (14) There were expenditures during the period of:
    - \$ 3,000.00 representing payment on loans from bank pending sale of assessment-improvement bonds.
      - 90,000.00 for general purposes for which appropriations had been made.
      - 30,000.00 for the construction of assessment improvements, of which \$25,000 was paid to contractors.
        - 8,500.00 representing taxes levied for and paid to other civil divisions.
        - 2,000.00 representing death benefits paid from employees' pension fund, made possible through sale of \$2,000.00 worth of securities plus accrued interest of \$50.00.
          - 500.00 representing loan made from employees' loan fund.
        - 2,250.00 representing one-half of city's share of assessment improvements, which was provided for in the general appropriations for the period.

(15) General obligations bonds amounting to \$10.000.00. with interest of \$280.00, were paid during the period.

(16) Assessment bonds amounting to \$25,000.00, and in-

terest of \$1.750.00 were paid during the period.

- (17) Various contracts were entered into totaling \$35,-000.00 for construction of assessment improvements, of which \$10,000.00 remained unpaid at end of period.
- (18) At the end of the period, there were unfilled purchase orders outstanding for general-office supplies amounting to approximately \$1,000.00. Unpaid items amounting to \$1,-200.00 represent similar goods already received.

(19) Construction improvements costing \$32,000.00 were completed during the period.

### PROBLEM 90

## PREPARATION OF COSTS

Following your audit of The Dale Publishing Company at June 30, 1911, you have been asked to write a letter to the manager, C. L. Packard, outlining briefly your recommendations for a method of collecting prime costs. In the course of your examination, you find that there are four principal sources of income: printing sales (handbills, letterheads, and so forth); bindery sales (desk organizers, order books, and so forth); newspaper subscriptions: and newspaper advertising. Total annual sales average \$\$0.000.00. The newspaper is a weekly, small-town paper having a circulation of about 2,500. The management is anxious that the sales and prime costs of the printing and bindery departments be kept separately. Numerous jobs go through these departments. It has been agreed that overhead expense is to be periodically apportioned to the two departments on the basis of the total sales of each department.

A competent bookkeeper has been engaged to carry out the suggestions which you make.

## PROBLEM 91

## DISTRIBUTION OF LEGAL PROFITS

From the information following, prepare a statement of partners' accounts at December 31, 1946.

X, Y, and Z, attorneys, agree to consolidate their individual practices at December 31, 1945. Assets, exclusive of cash, and liabilities at that date, all of which are taken over by the new partnership, are as follows:

	$\underline{X}$	$\underline{Y}$	$\underline{Z}$
Accounts receivable	\$14,248.00	\$5,248.60	\$15,900.00
Furniture and fixtures	4,300.00	2,500.00	6,200.00
Reserve for depreciation	2,480.00	1,578.00	4,698.00
Accounts payable	100.00	1,480.00	690.00

Each partner is to contribute \$5,000.00 as working capital. Z has leased office space, and is bound by the lease until June 30, 1947, the monthly rental being \$600.00. The partners agree to occupy his office space until the expiration of the lease. The partnership is to pay the rent. However, Z's drawing account is to be charged \$150.00 per month, the space having a present monthly rental value of \$450.00. Each partner is to guarantee his receivables contributed to the partnership. No salaries are to be paid to the partners; drawings are to be regarded as advances. The individual partners will receive 20 per cent of gross fees billed to their respective clients during the first year of the partnership. After deducting operating expenses, the balance of fees billed will be credited to the partners' accounts in the following ratios:

X.											40%
											35%
											25%

On April 1, 1946, W is taken into the partnership, and is to receive 25 per cent of the fees from new business, after deducting expenses applicable to the new business. Expenses are to be apportioned to new business in the same ratio that total expenses bear to total fees billed.

During the year ending December 31, 1946, fees were billed as follows:

X's clients	\$23,400.00
Y's clients	
Z's clients	10,460.00
New business—	
Prior to April 1, 1946	3,200.00
After April 1, 1946	8,030.00
	20.00
	\$63,740.00

Total expenses, exclusive of depreciation, were \$25,380.00. Depreciation should be computed at the rate of 10 per cent. Charges during the year to partners' drawing accounts were as follows:

W	\$1,500.00
<i>X</i>	5,200.00
Y	
Z	<b>=</b> 000 00

Of X's and Y's receivables, \$1,200.00 and \$450.00, respectively, proved to be uncollectible.

## PROBLEM 92

## Build-up of Accounts

A fire on April 1, 1944, destroyed all office records of the Ajax Distributors, Inc., except the minute book, the customers' and creditors' ledgers, and a profit-and-loss statement. From the information available, you are asked to prepare a balance sheet as of the close of the business on March 31, 1944.

Extracts from the minutes disclose the following facts:

## On January 1, 1944

Charter granted authorizing maximum capital of \$48,000.-00, consisting of \$16,000 of common and \$32,000 of preferred stock of a par value of \$100 per share, to be issued only on a basis of one share common to two of preferred.

Forty-four shares of the common and 88 shares of the preferred stock were subscribed for by the incorporators at par, and the corporation received cash for one-half the subscriptions to the common stock and the remainder in 6 per cent interest-bearing notes, payable to the corporation at its office on June 1, 1944. Land and buildings with an estimated life of 25 years were received in settlement of the preferred-stock subscriptions. Certificates were issued to the subscribers. The buildings were appraised at twice the value paid by the corporation, and, pursuant to a resolution of the board, these values were set up on the books on January 1, 1944.

The sale of \$5,000 6 per cent five-year bonds, with semiannual interest coupons attached, secured by deed of trust on land and buildings was authorized. Bonds in an amount equal to common stock issued were sold for cash at 95. It was provided in the trust agreement that the corporation must, on the last day of each quarter, set aside in a special fund equal amounts sufficient to retire the bonds sold at maturity (ignore interest), and to set up a reserve therefor.

Bought following equipment on terms of one-fifth cash and the balance in 4 equal payments, due on the last day of each month: store and office equipment with an estimated life of 10 years, and delivery equipment estimated to last 5 years.

Paid insurance for 1 year on buildings, equipment, and stock.

## On March 31, 1944

Dividend of 2 per cent on outstanding stock declared, payable on April 10, 1944.

## Additional Information Obtained from Bookkeeper

Books were kept on an accrual, deferred and reserve basis. Depreciation was computed on the straight-line method with no scrap values. All items of income or expense were cash unless otherwise indicated. All receivables and payables paid were within the discount period. A \$400.00 60-day 6 per cent interest-bearing note dated March 1, 1944, was received from a customer in settlement of his account. Salaries and rent were the same each month and March items have not been paid. Ten per cent of the outlay for advertising and store supplies for the period remained on hand on March 31, 1944. No accounts have been charged off as bad. The profit-and-loss statement follows:

# AJAX DISTRIBUTORS, INC. Profit and Loss, Quarter Ending March 31, 1944

Income from sales: Sales,terms 1%, 20,n/30 Sales returns	\$15,000.00 1,875.00	
Net sales		\$13,125.00
Purchases, terms 3 % 10, n 60 \$\$,000.00 Purchases returns 995.00	\$ 7,005.00	
Inventory, March 31, 1944	1,000.00	
Cost of goods sold		6.005.00
Gross profit on sales		\$ 7,120.00

Expenses:					
Selling—					
Sales salaries		,500.00			
Advertising supplies used	1	,130.00			
Store supplies used		180.00			
Expired insurance-Merchan-					
T.		25.00			
dise		20.00			
Expired insurance—Store		10.00			
equipment		16.00			
Expired insurance—Delivery					
equipment		20.00			
Depreciation—Store equipment		25.00			
Depreciation—Delivery equip-					
ment		62.50			
C. J Ni		212.50			
Sundry selling expenses		212.00			
	_		_	0.4 24.00	
Total selling expenses			\$	3,171.00	
General—					
Office salaries	Ş	600.00			
Rent		750.00			
Expired insurance—Office					
equipment		10.00			
Expired insurance—Buildings.		12.00			
Description Officerings.					
Depreciation—Office equipment		15.00			
Depreciation—Buildings		44.00			
Loss on bad debts		100.00			
Sundry general expenses		116.00			
Total general expenses				1,647.00	
				<del></del>	
Total expenses					4,818.00
zotał alponeacti i i i i i i i i i i i i i i i i i i					
Operating income					\$ 2,302.00
					÷ 2,002.00
Other income:	_	150.05			
Purchases discount	Ş	173.25	_	200.0-	
Interest earned		35.00	\$	208.25	
	-				
Deductions from income:					
Sales discount	S	98.25			
Interest expense		66.00			
Bond discount amortized		11.00		175.25	
Net addition to income					33.00
2.c. addition to income					
Total net income					\$ 2,335.00
rotal net meome					÷ 2,000.00
					<del>-</del>

## PROBLEM 93

## RECASTING OF BALANCE SHEET

D. L. Barnes and Company, a manufacturing enterprise, upon petition of its creditors, has been reorganized under the Federal Bankruptcy Act. On October 31, 1946, you were called

upon to prepare (a) a balance sheet for the reorganized company, giving effect therein to certain transactions consummated during the period from November 1 to November 6, 1946, and (b) a statement showing the changes that have taken place in the financial structure, and operations from the date the action commenced, the latter statement to be of whatever form you believe will best display the facts.

On July 31, 1946, when the petition to the court was filed, the financial position of the company presented to the court by the creditors and believed by them to present a true condition of the company's affairs was as follows:

### Assets

Cash	\$ 57.13
Customers, less reserve for bad debts of \$13,018.78	65,151.36
Merchandise inventory, obsolete or slow-moving stock, at	
cost	26,430.31
Merchandise inventory, in good condition, at cost—	
Raw materials	18,252.22
Work in process	29,540.01
Finished goods	5,242.54
Prepaid insurance on factory equipment	\$28.11
Treasury preferred stock—100 shares at cost	6,200.00
Land, at cost	2,000.00
Buildings, at cost, less allowance for depreciation of	
\$65,285.93	145,266.62
Machinery, at cost, less allowance for depreciation of	
\$101,798.82	128,276.31
Total	\$427,244.61
Liabilities, Etc.	
5% bank loans	
5% bank loans	\$ 85,000.00 730.00
5% bank loans	\$ 85,000.00
5% bank loans	\$ 85,000.00 730.00 127,208.63
5% bank loans	\$ 85,000.00 730.00
5% bank loans  Accrued interest thereon.  Trade creditors (raw materials)  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due  Accrued and past-due interest thereon	\$ 85,000.00 730.00 127,208.63 135,000 00
5% bank loans  Accrued interest thereon  Trade creditors (raw materials)  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due  Accrued and past-due interest thereon  Capital stock—	\$ 85,000.00 730.00 127,208.63 135,000 00
5% bank loans  Accrued interest thereon  Trade creditors (raw materials)  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due  Accrued and past-due interest thereon  Capital stock—  6% cumulative preferred, on which dividends have re-	\$ 85,000.00 730.00 127,208.63 135,000 00
5% bank loans Accrued interest thereon. Trade creditors (raw materials). 6½% first-mortgage bonds, of which a total of \$10,000.00 is past due Accrued and past-due interest thereon. Capital stock— 6% cumulative preferred, on which dividends have remained unpaid for 2 years—1,000 shares of par value of \$100 each.	\$ 85,000.00 730.00 127,208.63 135,000.00 17,550.00
5% bank loans.  Accrued interest thereon.  Trade creditors (raw materials).  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due.  Accrued and past-due interest thereon.  Capital stock—  6% cumulative preferred, on which dividends have remained unpaid for 2 years—1,000 shares of par value	\$ 85,000.00 730.00 127,208.63 135,000.00 17,550.00
5% bank loans Accrued interest thereon. Trade creditors (raw materials). 6½% first-mortgage bonds, of which a total of \$10,000.00 is past due Accrued and past-due interest thereon. Capital stock— 6% cumulative preferred, on which dividends have remained unpaid for 2 years—1,000 shares of par value of \$100 each.	\$ 85,000.00 730.00 127,208.63 135,000.00 17,550.00
5% bank loans.  Accrued interest thereon.  Trade creditors (raw materials).  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due.  Accrued and past-due interest thereon.  Capital stock—  6% cumulative preferred, on which dividends have remained unpaid for 2 years—1,000 shares of par value of \$100 each.  Common no-par stock—2,500 shares, no stated value.  Earned-surplus deficit.	\$ 85,000.00 730.00 127,20S.63 135,000.00 17,550.00 100,000.00 50,000.00 SS,244.02*
5% bank loans.  Accrued interest thereon.  Trade creditors (raw materials).  6½% first-mortgage bonds, of which a total of \$10,000.00 is past due.  Accrued and past-due interest thereon.  Capital stock—  6% cumulative preferred, on which dividends have remained unpaid for 2 years—1,000 shares of par value of \$100 each.  Common no-par stock—2,500 shares, no stated value	\$ 85,000.00 730.00 127,20S.63 135,000.00 17,550.00 100,000.00 50,000.00 SS,244.02*

<sup>\*</sup> Red.

Cash transactions during the 3-month period ended October 31 were as follows:

Balance, July 31, 1946	\$	57.13
Collections on customers' accounts		83,567.81
July 31		10,500.00
Sales of scrap.		862.50
Total	\$3	94,987.44
Disbursements—		
Factory wages	S	61,803.03
Raw-material purchases		89,867.93
Factory expenses		65,056.06
Administrative and selling expense		33,711.90
Bank loan in full, including interest		86,645.00
Trade creditors at July 31		12,720.86
Defaulted bonds, including all accrued and past-due in-		
terest of \$19,012.50 to September 30, 1946		24,012.50
Balance, October 31, 1946.	_	21,170.16
Total	\$3	94,987.44

The plan of reorganization drawn up by the creditors and approved by all interested parties and by the court involves the following changes in the existing corporation, all of which were carried out during the period between November 1 and November 6, 1946:

- (a) The old management is to be displaced by a new group to be headed by the trustee who represented the court during the proceedings and who has been allowed a compensation of \$2,400.00 by the court for the 3-month period (paid November 5).
- (b) Bondholders, including the owners of the 5 \$1,000 bonds still in default, will receive cash (payment made November 5) for any unpaid accrued interest at October 31, 1946, and one share of 5 per cent noncumulative preferred stock of \$100 par value for each \$200 in face value of bonds.
- (c) The balance owing the trade creditors of July 31 will be settled in full through the distribution to them, on an approximately prorata basis, of 5,725 shares of no-par-value common stock.
  - (d) Preferred stock outstanding at July 31 is to be turned

in and exchanged for 3,000 shares of no-par-value common stock; treasury preferred stock is to be canceled.

- (e) Common stock outstanding at July 31 is to be turned in and exchanged for 500 shares of no-par-value common stock.
- (f) The terms and shares of authorized preferred and common stock are to be modified through application to the secretary of state to agree with the above terms.
  - (g) The existing earned-surplus deficit is to be continued. Assets at October 31 1946, were to be valued thus:

Receivables, at book value— Accounts at July 31, 1946, less same reserve for bad debts of \$13,018.78.....\$ 2,025.10 Accounts representing unpaid sales for three months ending October 31, 1946, less estimated uncollectible portion of \$10.177.25..... 48,968,73 Inventories, at cost-Raw materials..... 15,360,71 Work in process.... 18.804.60 16,502.18 Finished goods..... 683.22 Prepaid insurance on factory equipment.....

Trade creditors for raw materials, \$62.348.96, constitute the only liability at October 31, 1946, resulting from the operations of the 3-month period.

#### PROBLEM 94

## Computation of Taxable Gain

In 1938, A purchased in his own name 50 shares of XYZ Co. Preferred Stock at 105 per share. In 1940, by reason of his ownership of such stock, he received 50 rights enabling him to purchase 25 additional shares of XYZ Co. Preferred Stock at 120 per share. A exercised his rights and purchased the 25 shares in joint account with his wife. Upon the issuance of the rights, the XYZ Co. Preferred Stock had a market value of \$130.00 per share while the rights had a market value of \$5.00 each.

In 1945, the XYZ Co. reorganized and exchanged for each old share of preferred stock 1 share of new preferred at a par

value of \$100.00 each and 2 shares of no-par common stock. Immediately after this exchange, the fair market value was \$50.00 for the preferred and \$5.00 for each common share.

In 1946, A sold 10 shares of preferred stock registered in his name at 76 per share and 10 shares of common stock registered in the joint account at \$18.00 per share.

A and his wife submit a joint return.

Required:

- (1) What was A's taxable profit or loss upon the reorganization and exchange of stock?
- (2) What is the deductible loss or taxable gain on the sale of the stock?
- (3) Under the Revenue Act would the above sale constitute a sale of a capital asset?
- (4) What percentage of the loss is deductible for tax purposes? To what extent are capital losses deductible?

## PROBLEM 95

## Computation of Available Profits

Foster Mills, Inc., has a net profit before bond interest and Federal income tax of \$147,390.00. According to the terms of the bond indenture, net profit, after deducting Federal income tax (which may be assumed to be 30%) but before deducting interest on bonds, will be applied against interest and principal (\$1,200,000 7 per cent gold bonds outstanding) in equal amounts if the interest requirements are more than one-half the net profit after deducting the Federal income tax. Interest expense so determined represents the total expense to the corporation for the period, the 7 per cent requirement merely limiting the amount of interest.

You are required to compute the interest expense, Federal income tax, and principal payment for the current year.

## PROBLEM 96

## RESTATEMENT OF BALANCE SHEET

Following is the trial balance of the New Deal Grain Co. as at June 30, 1946, together with certain related information, from which you are required to prepare adjust-

#### PROBLEM 96

ing journal entries, and a balance sheet intended for banks. The various items of the balance sheet must clearly described.

Account	$\underline{\mathbf{Debit}}$	Credit
Cash. Margins. Customers' accounts. Inventories of grain. Elevator properties. Furniture and fixtures Reserve for depreciation.	\$ 150,000,00 \$45,000,00 2,235,000,00 350,000,00 20,000,00	\$1,700,000.00
Investments.  Bank loans. Accounts payable. Accrued commissions, taxes, etc. Capital stock. Earned surplus, January 1, 1946. Net profits for period ended June 30, 1946.	227,000.00	603,000.00 25,000.00 10.000.00 600,000.00 175,000.00
Totals	\$3.527.000.00	\$3.327.000.00

## Investigation reveals that:

(a) The company acts as broker through its membership in various exchanges and owns and operates grain elevators

(b) The margins account comprises deposits made with-

Chicago Board of Trade Clearing Corporation.	\$265,000,00
Deland et Cie., a French broker.	
Brokers acting as agents in other cities	70,000.00
<u> </u>	
	\$345.000.00

Profit or loss on the above margins at June 30, 1946, he been reflected elsewhere in the accounts, except for the account the French broker which represents a deposit on the sale 30,000 ounces of silver at 70c per ounce. Correspondence we the French broker indicates that the account of the New I Grain Co. has a credit balance equivalent to \$31,000 (excha differences may be disregarded), together with a short posit of 30,000 ounces of silver. The market price of silver at June 1946, may be assumed to be 75c per ounce.

(c) Customers' accounts are composed of-

Contract-grain-trading debit balances arising from sales of futures (\$25,000.00 unsecured) \$ 154,500.00

Customers' margin deposits and credit balances, of which credit balances free from trading transactions amount to \$187,000.00.  Advances to Farmers' Cooperative for purchase of 25,000 bushels of grain not yet unloaded in company's elevators	1,870,000.00*
	\$1,700,000.00*
A computation of profit and loss on customers' open trades at June 30, 1946. shows—  Net loss on sales of futures on customers' accounts	
showing balances of \$1,650.000.00	
equate shorting beloness of \$33,000,00	400,000,00

<sup>\*</sup> Red.

A profit or loss on grain-futures transactions is customarily not taken up on the books until the contract is closed, *i.e.*, a sale is covered by a purchase or a purchase is covered by a sale. Margin deposits remain on the books as such until such closing, and an evaluation of the true status in the interim involves a consideration of the margin and the related profit or loss on open trades.

- (d) Inventories are priced at market, which is \$43,500.00 above cost. The company had sold futures at June 30, 1946, in an amount of 3,145,000 bushels on the Chicago exchange at an average price of 58c and had also sold 780,000 bushels elsewhere for delivery within 45 days at an average price of 59c. The company's practice is either to sell futures or to sell to various parties for future delivery at the time of purchasing grain, thus effecting a hedge, and earning the difference between the present and future delivery prices as storage for use of its elevators in the intervening period. Such income is regarded as earned when the covering transaction has been obtained.
- (e) Investments consist of bonds and memberships in various exchanges at cost, the quoted value at June 30, 1946, being \$180.000.00.
- (f) Bank loans are secured by a pledge of 1,250,000 bushels of grain.

The market price at June 30, 1946, of the grain in which the company and its customers deal was 60c.

#### PROBLEM 97

### REORGANIZATION ENTRIES -

The trial balance of the Bellwood Manufacturing Company at April 30, 1946, was as follows:

11p111 00, 1010, 1100 to 1010 1101	D-	<b>^</b> -
	$\underline{\underline{\mathrm{Dr.}}}$	<u>Cr.</u>
Cash on hand and in banks	\$ 118,656.79	
Trade accounts receivable, net	295,570.01	
Notes receivable	50,941.97	
Inventories-Products and supplies at	•	
lower of cost or market	\$11,888.03	
Investments in stocks and bonds at lower	•	
of cost or market	169,310.06	
Real estate—Appraised July 1, 1928	26,976.35	
Plant and equipment—Appraised July 1,	•	
1928	2,801,923.32	
Patents, franchises, etc	52,219.78	
Deferred charges and other assets	62,118.53	
Accounts payable	•	\$ 171,392.76
Notes and acceptances payable		95,216.37
Interest, wages, and taxes accrued		15,032.38
Reserve for depreciation on plant and		•
equipment		• 984,382.76
60, 30-year first-mortgage gold bonds,		
dated July 1, 1940		1,000,000.00
7% cumulative-preferred stock—\$50.00		-,,
par		750,000.00
Common stock—Class A—\$50.00 par		750,000.00
Common stock—Class B—5,000 no-par		
shares		250,000.00
Capital and paid-in surplus		315.973.6S
Earned surplus		57,606.89
		,000
	\$4,389,604.84	\$4,389,604.84

In December, 1945, the Board of Directors submitted to the stockholders a recapitalization plan which would have as its objectives the following purposes: (1) a write-down of the appraisal value of the plant and equipment to present-day prices, in order to reduce annual depreciation charges; (2) putting the stock on a dividend-paying basis (no dividends have been paid since July 1, 1943, an indenture in the mortgage providing that dividends may be paid only out of net profits derived from operations); and (3) a reduction of the present capitalization.

A summary of the plan presented to the stockholders was made as follows: (1) The question of a new 6 per cent cumulative-prior-preferred stock to be exchanged share for share

- (2) The parent company constructed an addition to the plant of its 60 per cent owned subsidiary, Elm Co., in 1942, at a cost of \$154,900.00. The subsidiary, however, paid the parent company \$190,000.00 for the plant, at which price it was recorded on the books of the subsidiary, and depreciated at an annual rate of 5 per cent (2½ per cent in 1942). Show the effect of the adjustments required on the minority interest and on net worth.
- (3) The parent company in 1944 acquired a subsidiary, Maple Co., by issuing to the former owners of the common capital stock of Maple Co. \$100,000.00 par value of a newly created 6 per cent preferred stock of the subsidiary. The net worth of the Maple Co. at the time of the acquisition was \$96,400.00. The difference of \$3,600.00 was charged to "Land Account" on the books of the subsidiary. The parent company returned to the subsidiary all the stock it had purchased and paid to the subsidiary \$1,000.00 for a new issue of 100 shares of no-par common stock, the entire amount outstanding.
- (4) The parent company acquired 60 per cent of the common stock of Beech Co. on June 30, 1944, at a cost of \$210,-000.00. At that date, Beech Co. had a net worth of \$509,000.-00, consisting of \$200,000.00 7 per cent nonvoting-preferred stock, on which there were 1½ years' dividends in arrears, \$400,000.00 common stock, and a \$91,000.00 deficit in earned surplus.
- (5) The balance sheet at December 31, 1944, of Poplar Co., an English subsidiary, in which the parent company has a 100 per cent interest, is as follows:

Assets— Cash in banks Customers' accounts	£ 5,500 20,400
Liabilities and net worth—	£25,900
Capital stock, 2,000 shares outstanding Earned surplus, December 31, 1943£2,400	£20,000
Net profit for the year ended December 31, 1944 3,500	5,900
	£25,900

The stock in Poplar Co. was acquired on November 30, 1943, at a cost of \$120,000.00. Earned surplus at that date was

£2,000. Exchange quotations on the three dates mentioned were:

Date	Quotation
11-30-43	. \$5.20
12-31-43	. 5.15
12-31-14	4.94

### PROBLEM 100

## PARTNERSHIP JOURNAL ENTRIES

Adam and Bede are partners in the A. B. Hay & Feed Company. The articles of partnership include the following provisions:

- (1) Interest at the rate of 6 per cent is to be credited to each partner's account at the end of the year; the interest computation is to be based on the respective capital accounts as of the end of the preceding year.
  - (2) Remaining profits, if any, are to be divided equally.
- (3) In the case of the death of either partner, the partnership is to be carried on by the surviving partner not more than 60 days after the date of death, at which time final liquidation and settlement are to be made.

Adam died on August 15, 1944. Under the terms of the will, a trust was set up, the life tenant of which was Adam's wife. The remaindermen were Adam's two sons. The will provided that the capital of the trust was to be kept intact. The interest in the A. B. Hay & Feed Company was included in the assets of the trust.

The capital accounts at December 31, 1943, were:

Adam	\$76,250.00
Bede	37,950 00
	=

## Profits were as follows:

712 months ended August 15, 1944	\$12,826.00
9½ months ended October 15, 1944	17,346.20

Bede made a settlement with the trustee of Adam's trust as of October 15, 1944, whereby Bede paid to the trustee \$100,-000.00 for Adam's capital as of December 31, 1943, and Adam's portion of the estimated goodwill of the company. In addition, Bede paid the trustee Adam's share of profits for the year 1944 to October 15, 1944.

Set up journal entries recording the above transactions on the trustee's books.

# PROBLEM 101 Application of Funds

The Fox Drug Company was organized July 1, 1936, by Peter Fox and James Cruze. Capitalization of the company consisted of 500 shares of \$100-par-value common stock and 750 shares of 7 per cent \$100-par cumulative-preferred stock. Fox subscribed for common stock totaling \$25,000.00, in payment of which he turned over to the company certain processes and formulas which were recorded at par. Cruze subscribed for a similar amount of common stock, in payment of which he turned over a building which was likewise recorded at the par value of the stock. The preferred stock was sold to outsiders at par.

On June 1, 1938, the company was reorganized in order to secure additional capital for new buildings and certain new types of laboratory equipment. Additional preferred stock of \$75,000.00 was authorized and issued at par as of July 1. The common stock was canceled and 4,000 shares of no-par stock were authorized having a stated value of \$25.00 a share. Each share of old common received 4 shares of new no-par stock. Fox and Cruze each purchased 1 share of the new common at \$25.00 a share in order to maintain control. The balance of the shares were sold to the public at \$37.50 a share. The difference between stated value and sales price was credited to surplus.

Within a short period of time, the company's business began to decline, and, at December 31, 1943, it was decided to reorganize in order to write off inflated asset values and eliminate unpaid preferred dividends which had accumulated from January 1, 1941. In this connection, the officers have asked you to summarize for them from what sources funds have been obtained and for what purposes they had been expended, from the inception of the business in 1936. You are requested to prepare this information.

The trial balance of the company at December 31, 1943, was as follows:

 Cash in banks
 \$ 34,897.78

 Accounts receivable
 48,837.26

Inventories Other current assets. Machinery and laboratory equipment Office furniture and fixtures. Land and buildings.	39,019.17 6,239.26 96,592.73	
Formulas, processes, patents, and copyrights	20,000.00	• • • • • • • • • • • • • • • • • • • •
Notes payable		\$ 20,000.00
Accounts payable.		38,937.72
Accrued liabilities		6,298.00
Other current liabilities		5,726.28
laboratory equipment		15,607.68
Allowance for depreciation—Office furniture		•
and fixtures		3,119.63
Allowance for depreciation—Buildings		9,659.27
Allowance for doubtful accounts		11,519.26
Common stock, no par		100,000.00
7%-cumulative-preferred stock, \$100 par		150.000.00
Surplus (deficit*)		30.837.16*
	\$330,030.68	\$330,030.68

<sup>\*</sup> Red.

Additional facts to be considered are:

- (1) Common-stock dividends were paid at the rate of \$10.00 a share on December 31, 1937, \$3.00 per share in 1938 and 1939, and \$1.50 per share in 1940.
- (2) In 1936 and 1937, \$20,000.00 of the formulas account was written off to earnings. During the life of the company, certain rights and processes were sold for \$10,000.00 which were credited to patents.
- (3) In 1938, the original building was sold for \$38,000.00. Accumulated depreciation at the time of sale was \$2,500.00.

#### PROBLEM 102

## Analysis of Bad-debt Reserve

From the data following prepare:

- (a) An analysis of the reserve for bad debts and losses on repossessions for 1946.
  - (b) A statement of cost of goods sold for 1946.

The Excelsior Machine Co. produces and sells industrial sewing machines. Certain of its balance-sheet accounts at December 31, 1945, follow:

Receivables	\$1,090,000.00		
Less-Reserve for bad debts and for			
loss on repossessions	300,000.00	Ş	790,000.00

Work in process 4	(0,000.00 0,000.00 0,000.00 590,000.00
Profit-and-loss data for the year 1946:	
Net sales	\$2,000,000.00
Purchases of raw material	350,000.00
Direct labor	250,000.00
Factory burden	790,000.00
Repossessions—	•
Credits allowed to customers	130,000.00
Inventory value of repossessed mer-	,
chandise	80,000.00
Bad debts charged off, other than on re-	
possessions	8,700.00
Bad-debt recoveries	5,000.00

The inventories at December 31, 1946, by physical count, valued at cost, were:

Raw material	\$170,000.00
Work in process	35,000.00
Finished goods	410,000.00

It is the policy of the company to set up 1 per cent of net sales as a reserve for bad debts, and to credit all bad-debt recoveries to the reserve.

Inspection of the final inventories shows that a burden of \$8,500.00 is included in work in process. Work in process was included in the opening inventories at prime cost. The burden on the opening inventories would have been \$9,200.00 if computed on the same basis as that contained in the closing inventory.

## PROBLEM 103

## FUND BALANCE SHEETS

The board of education of the Margate Public School District 100 has been criticized for overspending its available funds, and you have been called in by the board to prepare a balance sheet of the school district as at June 30, 1944, and a statement of revenues and expenditures for the year ending on that date. It is agreed that the expenditures should be shown on an accrual basis, without regard to tax-levy provisions. The adjustments to tax-levy revenue caused thereby should be detailed as a part of the statement of revenues and expenditures.

Below is the budget for the school year ended June 30, 1944, as it appears in the minutes of the school's board of education, together with a statement of receipts and disbursements for the same period summarized from the available records:

		Receipts and Disbursements	
Particulars	Budget	Educational Fund	Building Fund
Cash in hands of township treasurer, July 1, 1943		\$ 38,676.39	\$ 12,152.10
Current tax levy (calender tax year 1943), representing amount certified to county clerk and levied against assessed valuation of all taxable property	2222 24.24		
situated within the school district Less—Provision for loss and cost in	\$556,914.54		
collection	55,691.45		
Estimated revenue from taxes	\$501,223.09		
Receipts from— Collection of taxes— Current levy	20,000.00	\$ 90,896.45 277,490.95 14,612.50	\$ 34,540.65 114,615.77
which are payable from the proceeds of collections of 1943 levy		280,000.00	80,000.00
Total receipts	\$521,223.09	\$662,999.90	\$229,156.42
Opening balance, plus receipts		\$701,676.29	\$241,308.52
Disbursements— Salaries and wages Supplies, fuel, insurance, and other	\$350,150.00	\$374,450.19	\$ 2,000.00
operating expenses	21,830.59	21,443.68	3,826.07
Matured building-construction bonds— Due October 1, 1943  Due October 1, 1944  Maturities of bond interest—	75,000.00		50,000.00
October 1, 1943	22,500.00 20,812.50		22,500.00 20,812.50
1943 warrants		25,000.00 200,000.00	10,000.00 90,000.00
1943 warrants		1,125.00	450.00

1942 and prior warrants	30,000.00	23,692.06	10,742.13
Final installment on street-paving special assessment  Payment of all accounts payable outstanding as at June 30, 1943, for	930.00		930.00
supplies and other operating expenses	·	2,089.46	312.16
Total disbursements	\$521,223.09	\$647,800.39	\$211,572.S6 ———
Cash in hands of township treasurer, June 30, 1944		\$ 53,875.90	<u>\$ 29,735.66</u>

Following is the status of uncollected taxes as at June 30, 1944:

Tax-Levy Year	Original Levy Less 10% Reserve for Loss and Cost	Collections	Uncollected Balance (Net)
Educational— Prior years.  1943.  1944 applicable to year 1944–5	\$1,853,219.76	\$1,611,201.78	\$242,017.98
	361,092.17	90,896.45	270,195.72
Building— Prior years.  1943.  1944 applicable to year 1944–5.	673,405.27	501,979.57	171,425.70
	137,215.03	34,540.65	102,674.38

In addition to the sale of tax-anticipation warrants indicated in the foregoing statement of receipts and disbursements, 1942 building-fund tax-anticipation warrants were issued at par to redeem \$25,000.00 in principal amount of building-construction bonds as at October 1, 1943.

As at June 30, 1943, the following tax-anticipation warrants payable from collections on the 1942 and prior tax levies were outstanding:

Payable Only from Taxes Collected for	Principal
Educational purposes	\$395,000.00 150,000.00
Total	\$545,000.00

Following is an analysis of accrued interest on tax-anticipation warrants:

Payable Only from Taxes Collected for	Balance 6–30–43	Subsequently Accrued	Paid 6–30–13 to 6–30–14	Balance 6-30-11
1942 and prior years—	• 40 00T 00	010 410 04	020 000 00	00-010
Educational purposes	\$40,927.60 18,5\$4.3\$	\$18,412.04 5,944.45	\$23,692.06 10,742.13	\$35,647.5S 13,786.70
Building purposes	10,002.00	0,333.40	10,742.10	15,760.70
Educational purposes		8,777.37	1,125.00	7,652.37
Building purposes		3,350.22	450.00	2,900.22
Totals	\$59,511.98	\$36,4S4.0S	\$36,009.19	\$59,986.87

The board of education has estimated that, subsequent to June 30, 1944, interest will accrue on 1943 and prior warrants up to the time of the final redemptions, as follows:

<u>Particulars</u>	Amount
1942 and prior warrants—	
balance of prior years' estimates— Educational purposes	S 4.352.42
Building purposes	
1943 warrants—	17 0 (7 00
Educational purposes	17,847.63 6,599.78
Building purposes	0,099.78
Total	\$30,013.13

Accounts payable for supplies and so forth at June 30, 1944, totaled \$2,517.90, of which \$2,112.70 was applicable to the educational fund and the balance to the building fund.

Bonded indebtedness consisted of two building-construction issues:

- (1) Originally issued, \$1,000,000.00; retired in prior years, \$500,000.00; retired in current year, \$50,000.00; due in succeeding years, \$450,000.00.
- (2) Originally issued, \$500,000.00; retired in current year, \$25,000.00; due in succeeding years, \$475,000.00.

The provision of \$75,000.00 in the current year's budget covers the maturities on the above issues due on October 1, 1944. Maturities of the same amount during the current year were provided for in the budget of the next preceding year in accordance with the provisions of the trust indentures underlying the two issues. Interest on both issues is chargeable against the tax levies applicable to the year in which it is paid.

## PROBLEM 104

## RECASTING OF BALANCE SHEET

The New Deal Subsidiary Corporation is wholly owned by the New Deal Corporation. You have been called in by the trustee for the 6 per cent debentures of the New Deal Subsidiary Corporation to prepare a balance sheet of that company as of December 31, 1944.

In examining the indenture, you discover the following provisions:

"The New Deal Corporation guarantees that the net earnings of the New Deal Subsidiary Corporation during each year shall be at least 150 per cent of the annual interest charges on all its indebtedness outstanding at the end of the year. 'Net earnings.' as referred to herein, shall be the excess of cash receipts over cash disbursements before interest deductions. The New Deal Corporation further guarantees that so long as any of the 6 per cent debentures of the New Deal Subsidiary Corporation are outstanding, the value, not exceeding market, of the tangible assets of the subsidiary at the end of each year shall be at least 125 per cent of the total amount of all its funded debt and notes payable. The New Deal Subsidiary Corporation shall, upon determination of any deficiency or deficiencies, as set forth above, bill the New Deal Corporation for such deficiency or deficiencies, and adjust the balance sheet and profit-and-loss statement at the end of each year to conform with the requirement of the indenture. The New Deal Corporation shall pay such deficiency or deficiencies in cash."

Other facts discovered in the course of your examination are: There were no additions to fixed assets in 1944, but fixed assets totaling \$56,500.00 were charged to the reserve for depreciation.

The amount of accounts receivable written off against the reserve for bad debts during 1944 was \$24,000.00.

Market values at December 31, 1944, of \$100-par common stock of the Q.E.D. Company, the 7 per cent preferred stock of the I.O.U. Company, and the no-par value stock of the F.O.B. Company were 60, 50, and 42½, respectively.

## NEW DEAL SUBSIDIARY CORPORATION

	Trial Balances		
	Aiter Closing	Before Closing	
<u>Debits</u>	Dec. 31, 1943	Dec. 31, 1944	
Fixed assets	\$ 5,256,500.00	\$ 5,200,000,00	
Amortization of debt discount and expense		\$9,033,03	
Inventories	69.669.288	588.000.00	
Prepaid interest		12.000.00	
Cash	625,000.00	498.000.00	
Operating expenses (including provisions for de- preciation and bad debts)	·	1,128,500,00	
Customers' secounts receivable	439,000,00		
Unamortized debt discount and expense.	277.530.03	275,000,00 247,500,00	
	200,000,000		
Other interest expense		6,000,00 60,000,00	
Property taxes	4.850.000.00		
Interest on funded debt.	±255000000	4.850.000.00 420.000.00	
Interest on tunded dep		######################################	
	\$11.82,000.00	\$18.885.000.00	
Credits			
Common stock, no-par value, 60,000 shares	\$ 3,022,022.02	\$ 3,030,030,00	
Reserve for bad debts	78.000.00	78,000,00	
Sales to customers.		981.633.03	
Accrued property taxes	200,000,00	245.000.00	
Reserve for depreciation	69.000.00	1,014,000,00	
5% note payable September 1, 1945		\$63.039.03	
Reserve for losses on investments.		255,000,00	
6% debentures, due April 1, 1958	7,033,033,03	7.033.033.03	
Earned surplus	552,000.00	297.030.00	
Accrued interest on funded debt	105,000,00	105,0,0,00	
	\$11.582,000.00	\$13.335.030.00	
Investments			
Q. E. D. Company \$100.00 par common stock	17.500 shares	\$1,750,000,00	
I. O. U. Company 7 preferred stock	11.000 shares	1.102.032.03	
F. O. B. Company. No-par common stock	40.000 shares	2,000,000,00	
was de ma germinant, as even Jane as amount in any par	active countries		
		\$4.850.000.00	

## PROBLEM 105

## ANALYSIS OF PROFITS

A and B are the inventors of a process having to do with the production of sheet metal, and applications for letters patent covering the process were filed in their names prior to June 15, 1944. On that date, an indenture was drawn creating a trust which had for its purposes the acquisition and holding of the applications and the resultant letters patent, the develop-

On June 30, 1945, and at the end of each 6-month period thereafter, the trustees distributed dividends to the beneficial owners of the trust, as follows:

June 30, 1945	\$10,200.00
December 31, 1945	17,400.00
June 30, 1946	28,308.00
December 31, 1946	27,600.00

Prepare an analysis of trustee's cash account showing the total amount of dividends distributed to each of the beneficial owners and the balance of cash on hand at the end of each of the 6-month periods beginning June 16, 1944, and ending December 31, 1946.

## PROBLEM 106

## STOCK-SUBSCRIPTION AGREEMENT

The Smith Coal Company, on July 1, 1940, inaugurated and guaranteed an informal employees' savings-investment plan under the terms of which any employee could subscribe for shares of the company's 5 per cent preferred stock at par. Shortly thereafter, subscriptions of \$2,700,000.00 were received, and warrants were issued evidencing the subscriptions. Payment was made by monthly payroll deductions over a 5-year period ending July 1, 1945. Any subscriber who wished to withdraw at any time during that period could receive in cash the amount he had paid in (subscriptions of \$550,000.00 were thus canceled), but those who completed their payments by July 1, 1945, were to receive in addition to their stock a 30 per cent cash bonus representing a contribution by the company.

On June 1, 1944, an amended plan was perfected whereby all the continuing original-plan subscribers relinquished their subscription warrants for warrants under the new plan and received immediately a cash bonus equal to 30 per cent of the face of their subscriptions. A total of \$630,000.00 was paid on that date by the company to subscribers who had completed the payment of their subscriptions. The new warrants gave the holders the option of receiving:

(1) At any time prior to July 1, 1949, their prorata share of the stock in the fund, or

(2) At any time after July 1, 1949, either (a) their prorata share of the stock in the fund as at July 1, 1945, or (b) cash in the amount of 70 per cent of their original subscriptions paid in.

You are requested to certify to the consolidated balance sheet of the Smith Coal Company and subsidiaries and the parent company's balance sheet. Show how you would reflect the fund, if at all, on each of the two balance sheets. Give reasons for your decision to include or exclude the fund on each balance sheet.

An after-closing trial balance of the fund at December 31, 1945, follows:

Debits	
Cash.	\$ 50,000.00
Subscriptions	2,150,000.00
Securities	2.195,000.00
	\$4.395,000.00
Credits	
Subscribers' warrants	\$2,150,000.00
Subscribers' payments on subscriptions	2,130,000.00
Paid-in surplus	15.000.00
Earned surplus	100.000.00
	\$4,395,000.00

The trial-balance caption, "Securities," represents the cost of 27.000 shares of Smith Coal Company's 5 per cent cumulative-preferred stock purchased prior to July 1, 1945, the quoted market value being \$50.00 per share at December 31, 1945. "Subscribers' payments" include partially paid subscriptions of \$30.000.00, all belonging to former employees ineligible to participate in the new plan. "Paid-in surplus" represents the excess of the company's cash contributions over bonus payments. "Earned surplus" consists of the excess of dividends received over expenses paid.

# PROBLEM 107 Consolidation Elimination

A Corporation is the owner of 8.000 shares of the nonvoting, \$5-cumulative, no-par-value preferred stock and 15.000 shares of the no-par-value common stock of B Company. These shares were acquired as follows:

	Preferred		Com	ımon
<u>Date</u>	Shares	Cost	Shares	Cost
Purchases—				
February 1, 1943	2,000	\$174,000		
July 1, 1940		455,000	4,000	\$ 35,000
January 1, 1944		·	6,000	150,000
December 31, 1944	1,000	91,000	2,000	50,000
Stock dividend—				
January 1, 1945			3,000	45,000
	8,000	\$720,000	15,000	\$280,000
	===			

B Company's common stock in the amount of 16,000 shares was issued on January 1, 1929, in exchange for all the net assets of M Company; the net worth of the M Company at the time of the reorganization was \$266,000 and the difference between this figure and \$320,000, the stated value of the 16,000 shares, was added to the Machinery account. Preferred stock of 10.000 no-par-value shares was issued and sold to the public on July 1, 1931, by investment bankers at \$105 per share; the repurchase price in voluntary or involuntary liquidation or in any reacquisition was fixed at \$100 per share. Upon receipt by the company of the net proceeds of \$980,000, the directors gave to the preferred shares issued in exchange a stated value of \$40 per share and authorized a credit of \$580,000 to surplus. A stock dividend of 4,000 common shares was issued on January 1, 1945, to the common stockholders; the stated value on B Company's books was the basis of the entry crediting A Corporation's earned-surplus account. On December 31, 1946, 2 years' of the 3 years' dividends then cumulated were paid in cash to preferred stockholders.

Following is a surplus ana'ysis:

Period to	From Capital Stock	Net Profit, after All Proper Charges	Dividends	Balance
June 30, 1931		\$ 20,000		\$ 20,000
July 1, 1931	\$580,000	•		600,000
January 31, 1933		535,500	\$203,000	932,500
June 30, 1940,		783,300	615,000	1,100,800
December 31, 1943,		\$2,000	287,000	\$95,800
December 31, 1944		2,000*	,	893,800
January 1, 1945,			60,000	\$33,800
December 31, 1946		154,200	100,000	\$88,000
*Red			,	,

By means of one journal entry, accompanied by suitable explanations, show how you would reflect any or all of these items in the eliminations column of a consolidated worksheet. Give your reasons for omitting any item. Show also how you would display minority stockholders' interests on the consolidated balance sheet.

## PROBLEM 108

### ANALYSIS OF REORGANIZATION

The Universal Manufacturing Company was unable to meet the semiannual interest payment due September 1, 1941, on its 6 per cent first-mortgage bonds and on its 7 per cent gold notes, both issues maturing March 1, 1948; the principal amounts outstanding at the date of default were \$3,250,000.00 and \$1,700,000.00, respectively. At the instance of the indenture trustees, receivers were appointed to take over the assets and to continue the operation of the company as at September 1, 1941. On October 15, 1944, a petition was approved by the court authorizing a reorganization in accordance with the provisions of the Federal Bankruptcy Act. A plan of reorganization, effective March 31, 1945, was approved by the court; included therein were the following provisions for the liquidation of existing obligations:

For each \$100.00 in principal amount of 6 per cent first-mortgage bonds (with September 1, 1941, and subsequent interest coupons attached), new securities to be issued as follows:

\$50.00 in principal amount of 6 per cent first-mortgage refunding bonds, dated February 1, 1945, and due in 10 years, and 216 shares of Class A stock of no-per value.

For each \$100.00 in principal amount of 7 per cent gold notes (with September 1, 1941, and subsequent interest coupons attached), new securities to be issued as follows:

\$20.00 in principal amount of 6 per cent refunding notes, dated February 1, 1945, and due in 10 years, and 1 share of Class A stock of no-par value.

For each \$100.00 of general claims (trade accounts payable, and so on, totaling \$52,500.00), new securities to be issued as follows:

\$20.00 in principal amount of 6 per cent refunding notes, dated February 1, 1945, and due in 10 years, and 1 share of Class A stock of no-par value.

For each 5 shares of outstanding \$100-par-value preferred stock (of which there is a total of 25,000 shares), 1 share of new Class B stock of no-par value will be issued.

The 100,000 outstanding shares of \$10-par-value common stock are to be canceled without consideration.

No provisions for interest accruing on the bonds and notes subsequent to September 1, 1941, have been entered on the records of the corporation. A capital-surplus account of \$549,367.00 was created in a prior year through appreciation recognized from an appraisal of the land, buildings, and machinery. The earned-surplus account contained a debit balance at December 31, 1944, of \$2,163,058.29, which was reduced at March 31, 1945, by the net profit to that date, per books, of \$25,119.17. The minutes of the board of directors contain a resolution to charge the earned-surplus deficit at March 31, 1945, subject to adjustments thereto, against the existing capital surplus and the surplus resulting from the reorganization.

The court has approved the fees of attorneys and others, in connection with the reorganization, totaling \$275,000.00, but no entry therefor has been made. The board of directors has also approved the payment of the above fees along with the following unentered items, which appear to be proper, as charges against the existing capital surplus and the surplus resulting from the reorganization:

Additional provision for losses on deposits in closed banks.  Additional provision for bad debts	\$	150,000.00 50,000.00
Write-off of unamortized bond and note discount and		,
expense		63,047.12
Write-off of obsolete inventories		119,000.00
Reduction of book value of abandoned plant to estimated		
salvage value	2	,150,000.00
	=	

A stated value has been placed by the board of directors on the new Class A stock of \$10.00 per share, and on the new Class B stock of \$1.00 per share.

From the foregoing information, prepare the following:

Statement of surplus accounts for the 3 months ended March 31, 1945.

Statement showing the obligations liquidated in reorganization, the new securities created, and the resulting increment from each class of liability liquidated, as at March 31, 1945.

## PROBLEM 109

## BALANCE SHEET OF MUNICIPALITY

In connection with an accounting system you are developing for the city of Highland, you are required to prepare a balance sheet as at the effective date of the installation, June 30, 1945, composed of three independent funds:

> General and sundry funds Bond-redemption fund Property fund

Various data have been assembled from the memorandum records heretofore maintained by the city. All cash is deposited in a single bank account, and the bank statement at June 30, 1945, indicates an undrawn balance of \$95,154.20; cash warrants for current expenses, dated during the period from May 8 to June 30, 1945, were outstanding at that date in the amount of \$4,208.76.

Separate tax-levy rates are extended for general corporate purposes and for bond principal and interest purposes. The rates for the years ended June 30, 1942 to 1945, both inclusive, produced the following tax assessments, of which it has been estimated that 95 per cent will ultimately be realized, because of abatements and other losses in collection:

Corporate	${f Debt}$
Levy	Levy
\$376,447.20	\$102,319.20
329,186.40	97,426.80
315,002.80	95,107.60
331,976.20	99,042.00
	Corporate <u>Levy</u> \$376,447.20 329,186.40 315,002.80 331,976.20

Cash collected to June 30, 1945, on the foregoing levies revealed the following totals:

1942	\$354,190.27	\$ 96,075.14
1943		
1944	287,736.05	86,583.72
1945	291,521.70	\$6,118.62

Uncollected water bills and licenses amounted to \$4,875.60, subject to an estimated reserve of 10 per cent for bad debts.

Inventories of materials and supplies amounted to \$11,-019.81.

Unpaid salaries and wages aggregated \$5,880.73.

A single 20-year bond issue of \$1,000,000.00, dated July 1, 1941, bearing interest at 4 per cent per annum payable semi-annually on January 1 and July 1, represented the only funded debt of the city. It had been sold at par. The proceeds from the sale of these bonds, except for \$25,150.00 which can be used only for new construction, were expended for a new city hall and park. The minutes of the city council contain schedules indicating that annual tax levies are to be made for debt service during each of the 20 fiscal years ending June 30 to provide (a) approximately equal amounts for the ultimate retirement of the principal and (b) interest accruing during that year.

During the 4-year period, bonds of a face value of \$175,000.-00 have been reacquired at par and they have been responsible for savings in interest disbursements totaling \$10,500.00 to January 1, 1945, inclusive, the date of the last semiannual payment. No charges are to be made to the bond-redemption fund for administrative or tax-collection overhead.

Properties, consisting of land, buildings, and equipment, have been valued at cost, \$2,317,204.00; accrued depreciation on a straight-line basis amounts to \$489,076.47.

#### PROBLEM 110

### TREASURY-STOCK ACCOUNT

Following are the details of an account called "Treasury Stock" which appears as an asset in the amount of \$37,256.00 on the June 30, 1947 consolidated balance sheet of the Apex Company:

	Date	Explanations	Debit	Credit
(a)	1- 4-37	Capital stock of Apex, Inc. (the predecessor company, dissolved after reorganization on 1-1-37).	6 = 000	
(b)	1- 4-37	All of the capital stock of Apex New York, a distributor subsidiary, established in 1930.	15,200	

(c)	1- 4-37	Common stock, recorded at \$100 par value, reserved for management bonuses: issued in 1947, 40 shares, and in 1944, 53 shares; on hand in 1947, 47 shares	14,000	
(d)	5-31-39	38 shares of prefe red stock repurchased from company's vicepresident at \$115 per share; originally purchased by him in	1,000	
		1937 at \$103 per share	4,370	
(e)	12-15-12	276 shares of common stock repurchased on	·	
		open market at 35	9,660	
(f)	12-31-45	Fractional shares remaining undistributed		
		from dividend paid in common stock:		
		25½ shares		\$2,550
(g)	2- 1-46	Sales for cash of 81 shares of stock repur-		
		chased in 1942		8.424

Comment briefly on each of these items, explaining what further corporate action, if any, should be taken on them, what additional information you would require before disposing of them, and how you would probably adjust the account and show these amounts in the balance sheet. Your answer should be in narrative form and no figures need be cited.

### PROBLEM 111

# INTEREST AND SUBSIDIARIES

From the information following, compute the interests of parent company and minority stockholders in the earned surplus and current year's earnings of subsidiaries, using the basis established by the company.

Bryan Oil Co. holds a controlling interest in 5 subsidiary companies which were established by it in past years to take over certain acquired marketing outlets. The charter of each of these companies provides that if preferred-stock dividends are in arrears for 3 or more years, voting control will pass to the preferred stockholders. Hence, in the process of consolidating the accounts, subsidiary earnings or losses have always been divided between majority and minority interests, as follows:

- (1) Profits, after deduction of preferred dividends for the year, are divided on the basis of common-stock ownership.
- (2) Losses, after provision for preferred dividends for the year, are absorbed in their entirety by the parent company.

Data relating to the subsidiaries and stock ownership therein follow:

The Series A bonds were issued December 31, 1932, in the amount of \$3,000,000.00, maturing \$100,000.00 on December 31 each year from 1935 to 1940, inclusive, \$200,000.00 on December 31 each year from 1941 to 1946, inclusive, and the balance of \$1,200,000.00 on December 31, 1947. The company met each maturity when due until it defaulted on the December 31, 1943, maturity. On December 31, 1944, however, it corrected this default by payment of both the defaulted and current maturities, or \$400,000.00. The original amount of bond discount on this series was \$175,500.00, and amortization up to and including December 31, 1942, was provided in accordance with the company's amortization schedule; this schedule, computed on the bonds-outstanding method and verified and accepted by you, indicates that amortization should have been provided in the amounts of \$10,000.00 on December 31, 1943, \$9,000.00 on December 31, 1944, \$8,000.00 on December 31, 1945, \$7,000.00 on December 31, 1946, and \$6,000.00 on December 31, 1947. You are informed by the company's accountant that, upon the default of the December 31, 1943, maturity, the treasurer had directed that the remaining unamortized balance of bond discount applicable to this issue be written off in 5 equal installments from December 31. 1943, to December 31, 1947, inclusive.

The Series B bonds were issued December 31, 1937, in the amount of \$1,250,000.00, the entire issue maturing December 31, 1950. As of December 31, 1939, however, the company called and retired \$500,000.00 principal amount of this series as required by the trust indenture because of the sale of part of the mortgaged property securing the issue. The original amount of bond discount on this series was \$78,000.00, and provision has been made for amortization at the rate of \$6,000.00 each year.

The Series C bonds were issued December 31, 1938, in the amount of \$750,000.00, the entire issue maturing December 31, 1945, but the company is obligated to make sinking-fund deposits with the trustee as of December 31 each year for retirement of these bonds. The amount of such sinking-fund deposit required under the trust indenture is 20 per cent of the adjusted net earnings as therein defined, and the company may turn in to the trustee in fulfillment of the sinking-fund-deposit requirement bonds of this series at cost. The company has

purchased bonds to meet its sinking-fund requirements on the basis of the following:

Year	Adjusted Net Earnings	Price Paid for Bonds
1989	. \$882.000	98
1940	. 427,500	95
1941	. 127,500	S5
1942	. None	
1943	. None	
1944	552,000	92
	====	

The original amount of bond discount on this series was \$45,000.00, and the management, estimating that the company's earnings would require sinking-fund deposits sufficient to retire the series in 5 years, ordered that the discount be amortized over the first 5 years on the bonds-outstanding method on the basis of retiring one-fifth of the issue each year. The amortization schedule thus computed which you have verified and accepted provided for write-offs as follows: 1939 — \$15,000.00; 1940 — \$12,000.00; 1941 — \$9,000.00; 1942 — \$6,000.00; and 1943 — \$3,000.00. However, after making the write-offs according to this schedule the first 2 years, the management decided, because of the prospects of low earnings or losses, to spread the balance of \$18,000.00 in equal annual installments over the remainder of the term of the issue and has accordingly written off \$3,600.00 each year on this account.

Prepare a journal entry for whatever adjustments you deem it necessary to make of unamortized bond discount at the balance-sheet date and of the profit-and-loss and surplus accounts. Also submit supporting schedules and explanations, and comment upon any alternative acceptable adjustments.

#### PROBLEM 113

## DEFICIENCIES UNDER BOND ISSUE

Parathon Distributing Company is a subsidiary of Paragon Feather Mills, Inc., and was organized in 1943 as the western outlet of its parent. Most of the capital necessary for establishing the subsidiary was derived from an issue of  $4\frac{1}{2}\%$  income bonds dated July 1, 1943. You have been retained by the trustee of these bonds for the purpose of preparing a state-

ment of financial position of Parathon which may be sent to debenture holders. Following are trial balances of Parathon:

Debits	Dec. 31, 1945 after Closing	Dec. 31, 1946 before Closing
Interest expense	\$235,100.00 84,470.80 25,000.00 246,510.00 190,927.00 \$782,015.00	\$ 22,500.00 2,000.00 12,581.00 31,040.00 208,905.00 1,735,286.00 868,318.00 242,600.00 89,434.00 23,000.00 302,496.00 15,000.00 182,522.00 \$3,735,682.00
Crodita		
Credits  Sales  Reserve for bad debts  Common capital stock  Accrued taxes  Accrued interest  Reserve for depreciation  Accounts payable for operating expenses.  Income bonds (due July 1, 1958)  Earned surplus	\$ 8,500.00 10,000.00 87,767.00 11,250.00 15,238.00 131,000.00 500,000.00 18,260.60	\$2,887,000.00 35,200.00 10,000.00 212,189.00 22,500.00 23,647.00 26,886.00 500,000.00 18,260.00
	\$782,015.00	\$3,735,682.00

The income-bond indenture provides as follows: "Commencing with the calendar year 1946 Paragon guarantees that the net earnings of Parathon shall be not less than 200 per cent of interest falling due [on this issue] each year. 'Net earnings' are hereby defined to mean the excess of cash income received over cash expense disbursed before interest and dividend deductions. Paragon further guarantees that if bonds of this issue are outstanding at the end of any calendar year, the value, not exceeding market, of the tangible assets of Parathon shall be not less than 150 per cent of all its [Parathon's] funded debt. Parathon shall, upon the determination of the existence of either or both of these deficiencies, bill Paragon for the total amount thereof, and shall adjust its balance sheet in

such a manner as to reflect such guarantees. Paragon shall pay the billed amount to Parathon within a period not greater than 50 days after the date of such billing."

Additions to Buildings and Equipment as shown by the books totaled \$14,200.00 for the year. Equipment which had cost \$6,700.00 was sold for \$4,956.00, and the difference was charged to the reserve for depreciation. Certain building improvements amounting to \$2,428.00 were added during the year but were erroneously charged to depreciation reserve.

1944 receivables collected during the year, charged off in 1945, and amounting to \$1,260.00, were credited to the baddebt reserve; \$5,600.00 of 1945 accounts were charged off in 1946 against the reserve, and the remaining 1945 accounts were collected.

The market value of inventories at December 31, 1945 exceeded cost; one year later the market was less by the amount of \$22,510.00.

You are asked to prepare a balance sheet of the Parathon Distribution Company at December 31, 1946, and a schedule showing the computation of the deficiency, if any.

#### PROBLEM 114

# CONSOLIDATED FINANCIAL STATEMENTS

You have been requested to furnish financial statements for XYZ Company and consolidated financial statements for XYZ Company and subsidiary companies, together with the necessary adjusting and eliminating entries.

You have completed your audit of these companies for the year ended December 31, 1944, and have prepared the following statements of the individual companies:

## Balance Sheets-December 31, 1944

Assets	X YZ Company	A Company	B Company	C Company	D Company
Cash	200,000.00	\$ 10,000.00 50,000.00	\$ 10,000.00 100,000.00	\$ 5,000.00 140,000.00	\$ 6,000.00 60,000.00
Inventories Prepaid expenses Investments in and ad-	100,000.00	40,000.00 5,000.00	40,000.00 5,000.00	60,000.00 4,000.00	70,000.00 3,000.00
vances to subsidiary companies—					
Stocks	500,000.00				
value	250,000.00 125,000.00				
Accounts	110,000.00 50,000.00	25,000.00	30,000.00	10,000.00	10,000.00

Building machinery an					
equipment		300,000.00 65,000.00*	200,000.00	100,000.00 22,000.00*	100,000.00 25,000.00*
Total assets	\$1,845,000.00	\$365,000.00	\$345,000.00	\$297,000.00	\$224,000.00
Linbilities					
Notes payable	. 100,000.00 . 300,000.00 g 1,000,000.00	\$ 25,000.00 30,000.00 100,000.00 100,000.00	\$ 50,000.00 25,000.00 150,000.00 200,000.00	\$ 30,000.00 40,000.00 100,000.00 100,000.00	\$ 20,000.00 15,000.00 125,000.00 100,000.00
Capital surplus Earned surplus		110,000.00	\$0,000.00*	27,000.00	36,000.00*
Total liabilities	. \$1.845,000.00	\$365,000.00	\$345,000.00	\$297,000.00	\$224,000.00
* Red.					
	Statement	s of Profit a	nd Loss		
	Year Ende	d December	31, 1944		
	XYZ	~ A	B	~ C	D
Particulars	Company	Company	Company	Company	Company
1 at ticulars					Company
Net sales		\$1,000,000.00 783,700.00*	\$400,000.00 328,600.00*	\$400,000.00 323,550.00*	\$500,000.00 391,900.00*
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00*	\$1,000,000.00	\$400,000.00	\$400,000.00	\$500,000.00
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00	\$400,000.00 \$2\$,600.00* 100,000.00* 500.00	\$400,000.00 \$23,550.00* 110,000.00* 750.00	\$500,000.00 391,900.00* 60,000.00*
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00	\$400,000.00 \$2\$,600.00* 100,000.00* 500.00 100.00	\$400,000.00 \$23,550.00* 110,000.00* 750.00 600.00	\$500,000.00 391,900.00* 60,000.00* 500.00 100.00
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00	\$400,000.00 \$2\$,600.00* 100,000.00* 500.00	\$400,000.00 \$23,550.00* 110,000.00* 750.00	\$500,000.00 391,900.00* 60,000.00*
Net sales Deduct—Cost of sales Selling, administrative, and general expenses Interest received Discounts earned Miscellaneous Bond interest Other interest	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00*	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00 6,000.00*	\$400,000.00 32\$,600.00* 100,000.00* 500.00 100.00 9,000.00*	\$400,000.00 \$23,550.00* 110,000.00* 750.00 600.00 6,000.00*	\$500,000.00 391,900.00* 60,000.00* 500.00 100.00 7,500.00*
Net sales Deduct—Cost of sales Selling, administrative, and general expenses Interest received Discounts earned Miscellaneous Bond interest	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00*	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00 6,000.00* 1,500.00*	\$400,000.00 32\$,600.00* 100,000.00* 500.00 100.00 9,000.00*	\$400,000.00 \$23,550.00* 110,000.00* 750.00 600.00 6,000.00*	\$500,000.00 391,900.00* 60,000.00* 500.00 100.00 7,500.00*
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00* 6,000.00*	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00 6,000.00* 1,500.00*	\$400,000.00 32\$,600.00* 100,000.00* 500.00 100.00 9,000.00* 3,000.00*	\$400,000.00 323,550.00* 110,000.00* 750.00 600.00 6,000.00* 1,500.00*	\$500,000.00 \$91,900.00* 60,000.00* 500.00 100.00 7,500.00* 1,200.00*
Net sales Deduct—Cost of sales Selling, administrative, and general expenses Interest received Discounts earned Miscellaneous Bond interest Other interest  Net profit or loss* for year.	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00* 6,000.00*	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00 6,000.00* 1,500.00*	\$400,000.00 \$2\$,600.00* 100,000.00* 500.00 100,00 9,000.00* 3,000.00* \$40,000.00*	\$400,000.00 323,550.00* 110,000.00* 750.00 600.00 6,000.00* 1,500.00* \$40,000.00*	\$500,000.00 \$91,900.00* 60,000.00* 500.00 100.00 7,500.00* 1,200.00*
Net sales Deduct—Cost of sales Selling, administrative, and general expenses Interest received Discounts earned Miscellaneous Bond interest Other interest  Net profit or loss* for year.	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00* 6,000.00* \$ 150,000.00 \$	\$1,000,000.00 783,700.00* 100,000.00* 1,000.00 200.00 6,000.00* 1,500.00* 6,000.00* 1,500.00* 1,000.00*	\$400,000.00 \$2\$,600.00* 100,000.00* 500.00 100,00 9,000.00* 3,000.00* \$40,000.00*	\$400,000.00 323,550.00* 110,000.00* 750.00 600.00 6,000.00* 1,500.00* \$40,000.00*	\$500,000.00 \$91,900.00* 60,000.00* 500.00 100.00 7,500.00* 1,200.00*
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00* 6,000.00* \$ 150,000.00 \$ 250,000.00 \$ 150,000.00 \$ 150,000.00 \$ 150,000.00 \$ 150,000.00 \$ 150,000.00	\$1,000.000.00 783,700.00*  1:0,000.00*  1,000.00*  1,000.00*  1,500.00*  5 60,000.00*  1,500.00*  1,500.00*	\$400,000.00 32\$,600.00* 100,000.00* 500.00 100.00 9,000.00* 3,000.00* \$40,000.00* ber 31, 194 00 \$50,000.00 00 10,000.00 00 40,000.00	\$400,000.00 323,550.00* 110,000.00* 750.00 600.00* 1,500.00* \$40,000.00* 4 0* \$25,000.00 0 52,000.00	\$500,000.00 \$91,900.00* 60,000.00* 500.00 100.00 7,500.00* 1,200.00* \$40,000.00 \$25,000.00* 51,000.00*
Net sales	\$2,000,000.00 1,727,500.00* 200,000.00* 22,500.00 2,000.00 77,000.00 18,000.00* 6,000.00* \$ 150,000.00 \$ 2320,000. 1940, \$ 3220,000. 200,000.	\$1,000,000.00 783,700.00* 150,000.00* 1,000.00 200.00 6,000.00* 1,500.00* \$ 60,000.00 \$ 10,000.00 \$ 90,000.00 60,000.00 \$ 10,000.00 \$ 10	\$400,000.00 32\$,600.00* 100,000.00* 500.00 100.00 9,000.00* 3,000.00* \$40,000.00* ber 31, 194 00 \$50,000.00 40,000.00	\$400,000.00 323,550.00* 110,000.00* 750.00 600.00 6,000.00* 1,500.00* \$40,000.00* 4 0* \$25,000.00 0 52,000.00 0 \$2,000.00	\$500,000.00 \$91,900.00* 60,000.00* 500.00 100.00 7,500.00* 1,200.00* \$40,000.00 \$25,000.00* 51,000.00*

<sup>\*</sup> Red.

XYZ Company was organized as at January 1, 1940, with an authorized capital stock of \$1,000,000.00, which was issued for properties, investments, and other assets, subject to certain liabilities and recorded on the books at the net value of \$1,075,000.00, \$75,000.00 having been credited to paid-in surplus.

Investments in subsidiaries were as follows:

	Acquired 1-1-40		d 1-1-40 Acquired 7-1-44		Balance 12-31-44	
Subsidiary	Par Value	Cost	Par Value	Cost	Par Value	Cost
		\$160,000.00 190,000.00 90,000.00 52,000.00	\$10.000.00	\$\$,000.00	\$100,000.00 200,000.00 \$0,000.00 70,000.00	\$160,000.00 190,000.00 90,000.00 60,000.00
Total	\$440,000.00	\$492,000.00	\$10,000,00	\$5,000.00	\$450,000.00	\$500,000.00

Sales in 1944 by XYZ Company to subsidiaries, which included a profit of 10 per cent of the selling price (7½ per cent in 1943), were as follows:

A Company B Company C Company D Company		400,000.00 200,000.00 200,000.00 200,000.00
Total	\$1	.00.000,000.

Inventories of subsidiaries contained merchandise purchased from XYZ Company as follows:

Subsidiary	12-31-1943	12-31-1944
A Company.  B Company.  C Company.  D Company.	30.000.00 35.000.00	\$ 30,000.00 25,000.00 40,000.00 65,000.00
Total		

Miscellaneous income (\$77,000.00) of the XYZ Company consisted of dividends. \$58,000.00, and service charges, \$19,000.00, received from subsidiary companies as follows:

	Dividends	Service Charges
A Company	\$50,000.00	\$ \$.000.00 \$.000.00
C Company	8,000.00	3,000.00 5,000.00
Total	\$58,000.00	\$19.000.00

The service charges have been added to cost of sales by the subsidiaries.

It was decided that adjustment should be made as at December 31, 1944, for a reserve for loss on investments in subsidiaries, on the following basis:

- (a) The amount of book values of investments in stocks of subsidiaries in excess of the underlying equities at the dates of acquisition should be charged to paid-in surplus to the extent of the balance in that account, and the remainder to earned surplus.
- (b) Losses from the date of acquisition to December 31, 1943, in excess of the current year's earnings should be charged to earned surplus.
  - (c) Losses for the current year in excess of profits from ac-

quisition to December 31, 1943, should be charged to profit and loss.

(d) Profits should not be taken up except to offset losses.

#### PROBLEM 115

#### BOND DISCOUNT UPON REFUNDING

As at November 1, 1945, A Company refunded its undefaulted outstanding obligations into a single issue of 4½ per cent first-mortgage bonds, due in 6 equal biennial installments from November 1, 1947, to November 1, 1957. The new issue was sold to bankers so as to yield the company 97 after all expenses. Details of the old issues follow:

Unamortized

			Discount
			and Expense
			(Bonds-
			Outstanding
		Principal	Basis) at
Nature of Obligation	Maturity	Unpaid	Nov. 1, 1945
First-mortgage 6% notes.	May 1, 1950	\$450,000.00	\$13,500.00
51/2% purchase-money ob-	•		
ligations	\$10,000.00 each Jan. 1	60,000.00	1,150.00
_	(\$60,000.00 Mar. 1, 1946	)	
7% debentures	₹ 60,000.00 Mar. 1, 1947	210,000.00	1,550.00
	90,000.00 Mar. 1, 1948	)	·
			<del></del>
Totals		\$720,000.00	\$16,200.00

Compute on two or more bases the discount and expense to be charged to profit and loss for the two remaining months of 1945.

#### PROBLEM 116

#### APPLICATION OF FUNDS

From the following unclassified data taken from the comparative balance sheets and the books of the Rale Manufacturing Company, prepare a statement of application of funds for the year ending December 31, 1944.

Increases or causes of increases in balance-sheet accounts— Provision for depreciation on buildings  Building, representing cost of new wing  Machinery, representing—	\$ 6,000.00 52,000.00
New machinery purchased \$28,000.00	
Less—Machinery sold for \$7,000.00 (profit included as current operating income), cost 10,000.00	18,000.00

Ten-year sinking-fund first-mortgage bonds sold at 90 on Jan-	
uary 2, 1944.	200,000.00
Unamortized bond discount at December 31, 1944	18,000.00
Sinking-fund cash	20,000.00
Sinking-fund reserve (charged to surplus)	20,000.00
Net operating profit for year ending December 31, 1944	250,000.00
Prepaid life-insurance premiums (prepaid to December 31, 1946)	24,000.00
Dividends receivable on life-insurance policies (offset credited to	•
surplus)	2,500.00
Cash surrender value of life-insurance policies (offset credited to	-
surplus)	9,000.00
Decreases or causes of decrease in balance-sheet accounts—	-
Reserve for fire loss, consisting of cost of replacing building de-	-
stroyed by fire, \$75,000.00; less annual credit to account,	
charged to operations as an expense, \$5,000.00	70,000.00
Reserve for depreciation on machinery representing—	
Depreciation accrued on machinery sold \$ 6,000.00	
Less—Depreciation charged to operating expense. 5,500.00	500.00
Patents written off	2,000.00
Preferred stock retired at a premium of 10%, which premium	
was charged to surplus; par value	300,000.00
Dividends paid on preferred and common stocks	75,000.00
Decrease in working capital.	149,500.00

# PROBLEM 117 Net-Worth Analysis

On May 1, 1944, the heirs of John Smith, deceased, organized the John Smith Machine Corporation with an authorized capital of \$25,000.00 for the purpose of acquiring and operating the John Smith Machine Works, a sole-proprietorship belonging to the estate of John Smith. Accordingly, the entire capital stock of the corporation, consisting of 250 shares with a par value of \$100.00 per share, was issued to the estate in exchange for the net assets of the business as existing at April 30, 1944, excepting the land and the building which were retained by the estate. The stock received by the estate was immediately distributed to the heirs. Before April 30, 1945, the corporation, in exchange for its promissory note amounting to \$20,000.00, acquired from certain of the stockholders, for cancellation and retirement, four-ninths of the outstanding capital stock.

The corporation continued to use the books of the proprietorship without making an adjustment for the changes in the capital structure of the business.

From the above particulars and following information, prepare the net-worth section of a balance sheet of the corporation as of April 30, 1945, giving effect in detail to all changes occurring to the business during the year.

Trial Balance-	-April	30,	1945
----------------	--------	-----	------

That Balance Tipin 60,	1930	
Accounts	Debit	$\underline{\text{Credit}}$
Cash in bank	\$ 14,385.98	
Accounts receivable	16,235.47	
Reserve for doubtful accounts		\$ 2,150.00
Unexpired insurance premiums	465.39	
Inventory of work in process, April 30, 1944	2,834.69	
Capital stock purchased	20,000.00	
Land	26,350.00	
Building	28,475.35	
Reserve for depreciation of building	•	11,959.65
Machinery	53,964.72	,
Reserve for depreciation of machinery	,	42,637.98
Accounts payable		2,897.71
Note payable on purchase of capital stock		20,000.00
Capital account of proprietorship April 30,		,
1944		84,566.29
Sales		54,553.28
Material	12,378.49	. ,
Labor	18,493.26	
Factory expenses	8,962.43	
Depreciation, building, \$569.51; machinery,	0,00-1-0	
\$5,396.47	5,965.98	
General expenses	10,253.15	
Concert inputsories services		
Totals	\$218,764.91	\$218,764.91
Inventory of work in process, April 30, 1945	\$ 2,619.50	

#### PROBLEM 118

## COST ANALYSIS AND OPERATING STATEMENT

The Electrical Manufacturing Company manufactures and distributes radios through jobbers. National Distributing Corp. buys radios on a cost-plus contract which contains the following provisions:

- 1. Electrical Manufacturing Company is to furnish its standard models under the National trade name. These are to be shipped F.O.B. factory as completed.
- 2. National is to be billed during the year for radios shipped at the following unit prices: Model A, \$10.00; Model B, \$20.00; Model C, \$30.00.
- 3. Prices are to be adjusted at the end of the year to average factory cost figured at the closest cent per unit plus a 10 per

cent allowance to cover shipping, general, and administrative expense and profit. In figuring factory cost, average material and labor costs for radios completed during the year are to be used and burden is to be figured by departments based on annual departmental cost without considering labor and burden in process at the beginning of the year. Any differences disclosed as a result of your investigation are to be prorated between ending inventories and cost of sales on a proportionate basis.

You are requested to prepare:

- 1. A statement of profit and loss for the year ended December 31, 1945, showing detail of cost of sales. Ignore any provision for Federal income tax.
- 2. A statement of unit costs of production for the year ended December 31, 1945.
- 3. A statement of the account with National Distributing Corp. as of December 31, 1945.

The trial balance of Electrical Manufacturing Company as of December 31, 1945, follows:

$\underline{Account}$	Debit	Credit
Cash	\$ 259,000.00	
Accounts receivable—general		
National Distributing Corp		
Inventories	425.000.00	
Land, buildings, and equipment	1,225,000.00	
Reserve for depreciation		\$ 340,000.00
Accounts payable		195.099.09
Capital stock		1,200.000.00
Earned surplus		559,000.00
Net sales		3,450,000.00
Cost of sales	2,990,000.00	
Burden absorbed in production		705,100.00
Cabinet-shop expense	231.690.00	
Machine-shop expense	227,000.00	
Assembly-department expense	220,200.00	
Building expense	100.000.00	
Receiving expense	25.638.00	
Warehouse and shipping expense	61,599.09	
Selling and administrative expense	374,162.00	
	\$5,440.100.00	\$6,449,100.00

Your examination discloses the following facts:

1. Building expense is to be divided on the basis of floor space as follows: cabinet shop, 30 per cent; assembly depart-

ment, 30 per cent; machine shop, 25 per cent; receiving department, 5 per cent; warehouse and shipping. 5 per cent; and general office, 5 per cent.

2. Inventories at December 31, 1945, as shown by the records, were as follows:

Particulars	Material		Labor	Burden		Total
Raw material	\$120,000.00				Ş	120,000.00
Cabinet shop	6,500.00	S	6,000.00	\$ 7,500.00		20,000.00
Machine shop	7,000.00		6,000.00	12,000.00		25,000.00
Assembly department	20,000.00		12,000.00	13.000.00		45.000.00
Finished radios	\$5,000.00		55,000.00	75,000.00		215,000.00
Total	\$238,500.00	<u>\$</u>	79.000.00	\$107,500.00	\$	425,000.00

3. Finished radio accounts are analyzed as follows:

<u>Particulars</u>	Model A	Model B	Model C	Total
Production transferred				
from work in process:	0400 000 00	A 022 400 00	<b>6270</b> 002 00	A1 001 100 00
MaterialLabor—	\$350,000.00	\$ 922,400.00	\$279,000.00	\$1,681,400.00
Cabinet shop	44.000.00	136,000.00	40,000.00	930 000 00
		4		220,000.00
Machine shop	20,000.00	75,000.00	15,000.00	110,000.00
Assembly department.	72,000.00	156,000.00	52,000.00	280,000.00
Burden—				-
Cabinet shop	55,000.00	168,500.00	50,000.00	273,500.00
Machine shop	40,000.00	148.000.00	30,000.00	218,000.00
Assembly department.	5±.000.00	119,100.00	39,000.00	212,100.00
	\$765,000,00	\$1.725,000.00	\$505,000,00	\$2,995,000,00
T				
Inventory January 1	10,000.00	90,000.00	20,000.00	120.000.00
	\$775,000.00	\$1,815,000.00	\$525,000.00	\$3,115.000.00
Sold	750,000.00	1,700,000.00	450,000.00	2,900,000.00
Inventory December 31	\$ 25,000.00	\$ 115,000.00	\$ 75.000.00	\$ 215,000.00
•				<del></del>

4. The statistical records show the following production and sales for the year:

Particulars	Model A	Model B	Model C
Inventory January 1	1,200 \$0,000	4,500 100,000	\$90 15.000
		<del></del>	
Net sales.	\$1,200 78,200	104.500 98,500	15,800 12,800
Inventory December 31	3,000	6,000	3,000

# 5. Inventories at January 1, 1945, were as follows:

Particulars	Material	Labor	Burden	Total
Raw material	\$ 80,000.00			\$ 80,000.00
Cabinet shop	8,000.00	\$ 8,000.00	\$ 9,000.00	25,000.00
Machine shop	10,000.00	4,000.00	6,000.00	20,000.00
Assembly department	30,000.00	14,000.00	16,000.00	60,000.00
Finished radios	50,000.00	30,000.00	40,000.00	120,000.00
		<del></del>		
Total	\$178,000.00	\$56,000.00	\$71,000.00	\$305,000.00

- 6. The company maintains perpetual inventories and job costs, using the first-in, first-out basis. Direct labor is charged directly to jobs and reconciled with the payroll records. Burden is charged to jobs on the basis of arbitrary percentages of direct labor which must be adjusted at the end of the year.
- 7. The physical inventory at December 31, 1945, shows raw material of \$115,000, a shortage of \$5,000.00. Work in process is taken from job tickets which are found to be correct as to quantities, and which include material and labor priced at cost. The finished radio inventory is found to be correct as to physical quantities but contains 1,000 Model C machines which had been rendered obsolete by engineering changes and which were sold in January, 1946, as a job lot for \$20,000.00.
- 8. It has been decided to charge the raw-material-inventory shortage to receiving expense and prorate that expense over material placed in production during the year and the remaining raw-material inventory.
- 9. The account with National Distributing Corp. is analyzed from the books as follows:

	\$10.00	\$	400,000.00
30,000 @	20.00		600,000.00
			300,000.00
		S1	,300,000.00
account	••••		
		\$	125,000.00
	30,000 @ 10,000 @ a account	40,000 @ \$10.00	40,000 @ \$10.00 \$ 30,000 @ 20.00

Capital surplus Earned surplus.	30,000.00 35,900.00	49,500.00 27,750.00
	\$293,500.00	\$377,950.00
PRINCE MANUFACTURII	1G CO	
Condensed Statement of Income		
and Analyses of Surplus and Oth For the Year Ended Decembe	er Accounts	
Condensed statement of income and expense: Gross income		\$195,000.00
		<del></del>
Operating and general expenses—		6110 000 00
Cost of sales Operating expenses	• • • • • • • • • • • • • • • • • • • •	37.700.00
Provision for taxes	• • • • • • • • • • • •	2,000.00
Provision for depreciation on—	• • • • • • • • • • • • • • • • • • • •	2,000.00
Buildings		9,000.00
Machinery		10,500.00
General and administrative expenses		9.950.00
Provision for doubtful accounts	•••••	1.000.00
Total		\$180,150.00
Operating income		\$ 14,850.00
Other expenses—		
Interest and discount on bonds		\$ 5,100.00
Loss on sale of capital assets	•••••	200.00
Total		\$ 5.300.00
Net income for the year		\$ 9.550.00
Analysis of capital surplus:		_
Balance, December 31, 1944		\$ 30,000.00
Add—Appraisal increase in land.		20.000.00
mI		e =0.000.00
Total Deduct—Write-down of investment in affilia	tod componer	500.00
Deduct—Write-down of myestment in annua	tea combany	
Balance, December 31, 1945		\$ 49,500.00
Anaylsis of earned surplus:		
Balance, December 31, 1944	• • • • • • • • • • • • • • • • • • • •	\$ 35,900.00
Profit on sale of investment		300.00
Net income for the year		9,550.00
m1		e 4= 7=0.00
Total		
Deduct—Dividends paid		18,000.00
Balance, December 31, 1945		<u>\$ 27,750.00</u>

Bonds of a par value of \$100,000.00, due January 1, 1959, were issued January 1, 1939, @ \$98.00. Additional bonds of a par value of \$75,000.00 were issued December 31, 1945, at a discount of \$2,100.00. All bonds bear interest at the rate of 5 per cent.

During the year 1945, the taxes for the entire years of 1943

and 1944 were paid.

A sale of an investment was recorded as follows:

Cash \$	\$10,300.00
Investments—Outside companies	\$10,000.00
Profit on sale of investments	300.00

The sale of a building resulted in the following entry:

Cash	\$ 1,300.00	
Loss on sale of capital assets		
Reserve for depreciation	500.00	
Buildings		\$ 2,000.00

Accounts receivable in the amount of \$700.00 were charged against the reserve for doubtful accounts.

Capital stock was sold at par in the amount of \$10,000.00.

#### PROBLEM 120

# Correction of Income Statement

From the following information prepare the necessary adjustments and a corrected statement of profit and loss:

Alpha Betical Company, Inc., operates a department store in a midwestern city. Inventories of certain departments—restaurant, candy, bakery, and so forth—are valued on the basis of cost, and have been reduced to the lower of cost or market. The inventories of the remaining sections are computed on the retail-inventory method. The inventories of the "retail departments" have been taken on the basis of selling prices appearing on the merchandise at the close of business at January 31, 1946; all of the required markdowns having been taken prior to the inventory and the inventory priced accordingly.

Several specialty departments are leased to concessionaires who supply their own merchandise and pay their own invoices. Cash received on cash sales and the collection of charge sales are deposited in the regular bank account of Alpha Betical Company, Inc. The net collections, after deductions of 10 per cent on cash sales and 12½ per cent on charge sales, are remitted to concessionaires monthly.

The profit-and-loss trial balance for the year ended January 31, 1946, is as follows:

	Debit	Credit
Sales		\$1,592,700.00
Returned sales	\$ 125,000.00	•
Inventory—2/1/45	177,000.00	
Purchases (net)	965,000.00	
Provision for shrinkage	12,000.00	
77 loading account		62,090.66
Administrative expenses	00.000.09	
Occupancy expenses	130.000.00	
Publicity expenses	68,000.00	
Buying expenses	48,000.00	
Selling expenses	210,000.00	
Leased department income		17,500.00
Net loss		161.709.34
Total	\$1.834.000.00	\$1.834.000.00

Your investigation reveals that:

(1) Sales and returned-sales accounts are composed as follows:

			Returned
	<u>Sales</u>		Sales
Sales price—			
Retail departments	\$1,527,700.00	\$	122,200.00
Cost departments			800.00
Additional charge for retailers' occupation	xet		
Retail departments	32,500.00		1,850.00
Cost departments	2,000.00		150.00
_		_	
Total	\$1.592,700.00	Ş	125.000.00

- (2) Sales of leased departments of \$155,000.00 and returns of leased departments of \$14,500.00 are excluded from sales and returned-sales accounts.
  - (3) Inventory at 2/1/45 is composed as follows:

Cost departments	Ş	1,700.00
Retail departments (including loading of 7% on		-
net cost)	1	75.300.00

(4) Aggregate selling prices of 2/1/45 inventory amounted to \$295,000.00.

(5) Purchases consisted of following-

Purchases, cost departments (net)	\$ 15,900.00
Purchases, retail departments (net)	887,000.34
7% loading on net cost of purchases, retail de-	
partments.	62,090.66

- (6) Aggregate selling prices of net purchases for retail departments amounted to \$1,640,000.00.
  - (7) Inventories at 1/31/46 were:

Cost departments, at lower of cost or market .... \$ 2,100.00 Retail departments at selling prices ..... 476,000.00

- (8) Additional markup on purchases of \$20,000.00 were taken during the year.
- (9) Markdowns amounted to \$5\$.000.00 and markdown cancellations to \$2.500.00 during the year.
- (10) The reserve for loading account showed a balance of \$11,468.22 as established at January 31, 1945, to reduce inventory to cost.
- (11) Reserve for inventory shrinkage account at January 31, 1946, shows a balance of \$12,000.00 accumulated by monthly provisions based on a percentage of sales.

#### PROBLEM 121

# Analysis of Pool Operations

You are called upon to prepare the following financial statements of a certain pool:

- 1. A statement, on the accrual basis, of income and expense for the 5 years ended December 31, 1945.
  - 2. Balance sheet as at December 31, 1945.

The stock of the Bruce Manufacturing Company was held by Claire. Edna. and Mary Bruce, none of whom were active in the management of the business. In order to retain the five key employees that constituted the active management and to dispose of part of their stock, the three Bruces contracted on January 1, 1941, with the five employees as follows:

1. For a period of 5 years from the date of the contract, the corporation would pay the general manager, the purchasing agent, and the comptroller salaries of \$1,000.00 per month each, and also a bonus of 10 per cent of the net profits of the corporation, to be divided equally among them.

- 2. For the same period, the corporation would pay the two sales managers together a commission of 5 per cent on all sales of the corporation, less all expenses of the New York sales office, to be divided equally between them.
- 3. In a separate contract, the present stockholders agreed to give to a pool organized by the five men the option to purchase on or before September 1, 1945, 60 per cent (1,800 shares) of the outstanding stock of the Bruce Manufacturing Company at a price per share equal to 8 times the average annual per share earnings as follows:
- (a) Net profits for each year are to have the following weight:

1941	1
1942	2
1943	3
1044	4
1945	

Any year showing a loss would be included at only ½ of its designated weight.

(b) Net profit or loss for each year is to be computed as follows:

Profit after deducting profit-sharing bonus, less depreciation of \$20,000.00 per annum on assets used in the business, and less interest paid or accrued on first-mortgage bonds in the following amount:

1941	\$15,000.00)	
1042	15,000.00	The interest rate was re-
1943	10,000.00	duced from 6% to 4% in
		1943 for a period of 5 years.
1945	$-10.000.00^{J}$	-

From the adjusted profits, Federal income tax at the arbitrary rate of 13% per cent is to be deducted.

The contract provided for a deposit of \$25,000.00 with an

The contract provided for a deposit of \$25,000.00 with an escrow agent upon exercising the option. The determination of the total price and terms of payment of the balance were to be agreed on after the close of the year 1945.

In order to divide equally the income resulting under the employment contracts, the five individuals, Martin Bailey, Glen Gregory, James Hartley, Elmer North, and Harry Graham, agreed to pool their income from commissions, salaries, and bonus—each member to have a 20 per cent interest in the

pool after allowing \$1,000.00 per year to Bailey for acting as pool manager.

For the 5 years ended December 31, 1945, sales, and so forth,

of the Bruce Manufacturing	Company we	ere as follows:
----------------------------	------------	-----------------

		Expenses	Total	Profit-	
		of	Commissions	Sharing	
		New York	Less Expenses	Bonus	Profit
		Sales	of New York	Paid to	After
Year	Sales	Office	Sales Office	Officers	Bonus
1941	\$1,200,000	\$32,000	\$28,000	\$ 6,000	\$ 54,000
1942	900,000	31,000	14,000		16,000*
1943	1,300,000	35,000	30,000	8,000	72,000
1944	1,500,000	40,000	35,000	13,000	117,000
1945	1,800,000	42,000	48,000	18,000	162,000

<sup>\*</sup> Red.

As at January 1, 1941, North and Graham, sales managers, owed the Bruce Manufacturing Company \$20,000.00. The pool agreed to assume this liability and arranged to liquidate the debt by paying 25 per cent of the net commissions earned by North and Graham plus interest at 6 per cent on the unpaid balance at the beginning of each year. Payments were made in accordance with this agreement.

During the 5-year period ended December 31, 1945, the pool had the following additional transactions:

Receipts—	
Dividends on Warner Mfg. Co. stock owned	\$15,500.00
Interest on bonds of Bruce Manufacturing Company	4,800.00
Loans on September 1, 1942, bearing 5% interest, from—	-,000100
Bailey	15,000.00
Hartley	10,000.00
	10,000.00
Disbursements—	
1. Paid \$11,000.00 per year to Bailey and \$10,000.00 per	
year to each of the other pool members for each of	
the 5 years.	
2. Purchased—	
620 shares of stock in the Warner Mfg. Co. (prin-	
cipal supplies to the Bruce Manufacturing Com-	
pany) at an average price of \$60.00 per share	37,200.00
\$40,000.00 par value of first-mortgage 4% bonds of	,
Bruce Manufacturing Company at an average	
price of \$80.00 (interest payable June 1 and De-	
combor 1)	32,000.00
cember 1)	32,000.00
3. Deposited with escrow agent on August 15, 1945, upon	
signifying intention to exercise option to purchase	
stock of Bruce Manufacturing Company	25,000.00
4. Sundry expenses of pool	4,500.00

Hartley resigned as of December 31, 1945, to accept a more remunerative position with a competitor. The remaining members of the pool agreed to have the pool:

1. Purchase his interest in the pool at 80 per cent of the book value of his interest as of December 31, 1945, based on the following valuations for the stocks and bonds held by the pool—

- 2. For the above purchase, pay him \$10,000 on 12/31/45 and the balance in 3 semiannual installments beginning July 1, 1946.
- 3. Repay at December 31, 1945, the money borrowed from Hartley plus interest at the specified rate.

#### PROBLEM 122

# ADJUSTMENTS OF PROPERTY ACCOUNT

The management of Company A has asked you to prepare analyses of the changes in the property-plant-and-equipment account and the reserve-for-depreciation account for the year 1945, as follows:

Additions

Retirements

Transfers

Additions to reserves—

- (a) Through charges to income account
- (b) Through transfers

Retirements charged to reserves

Transfers from reserves

The information is required for Company A, Company B (a subsidiary of Company A), and Companies A and B consolidated.

The companies follow the practice of making net monthly entries to the property accounts and reserves for depreciation.

For your use in obtaining the above information, the following facts are available:

<b>,</b>	Company A	Company B
Account balances:		
Property, plant and equipment—		
At December 31, 1944	\$180,921.37	\$39,865.42
At December 31, 1945	209,763.57	32,801.30

1945 tax-anticipation notes		23,000.00		
1945		450.00		
1945 Refunding 5% bonds due in 1950 4½% building-con-		60,000.00		0.000.000.00
struction fund bonds. Surplus:				\$ 920,000.00
June 30, 1945 December 31, 1945		626,550.00		1,660,600.00
Taxes levied		293,500.00		2,000,000.00
Allowance for loss and				
cost	21,000.00			
Tuition and fees		10,500.00		
Administrative expense	•			
Teachers' salaries	118,000.00			
Janitors' wages and				
supplies	24,200.00			
Plant upkeep Capital outlay—new	9,100.00			
equipment	18,000.00			
	\$1,334,000,00	\$1,334,000,00	\$2,580,600,00	\$2,580,600,00

Interest dates of the 1945 refunding bond issue are January 1 and July 1. Interest dates of the building-construction fund bonds are also January 1 and July 1.

On July 1, 1946, \$70,000.00 is to be paid to the sinking-fund trustee for the retirement of building-construction fund bonds. This payment is to be made out of the 1945–1946 tax levy. These bonds are due in annual installments to July 1, 1960.

On January 10, 1946, payment of \$5,500.00 was made out of the general fund for equipment installed in December 1945. The liability had not been recorded on the books at December 31.

On December 31, the school treasurer retired tax-anticipation notes of a principal amount of \$10,000.00, on which interest of \$480.00 had accrued. The bookkeeper was not notified of the transaction until January 2, 1946, and it is not reflected in the above trial balance.

Tax-anticipation notes bear interest at 6 per cent.

Cash of \$180,000.00 in the fixed-property fund represents an appropriation of prior years from the general fund, reserved for the construction of a new building. Surplus of the fixed-property fund at June 30, 1945, was \$1,642,600.00.

#### PROBLEM 124

## CONSOLIDATED FINANCIAL STATEMENTS

You are engaged to audit the accounts of XYZ Corp. and its subsidiaries. In connection therewith, the following condensed balance sheets and income accounts are presented for your examination:

Condensed Balance	Sheets—December 31, :	1945
-------------------	-----------------------	------

Particulars	XYZCorp.	Manufacturing Co.	Distributing Co.
Assets—	<u> </u>		
Cash	\$ 1,409,000.00	\$ 331,000.00	\$ 346,000.00
Notes and accounts receivable—	-		
Trade, net	2,151,000.00	764,000.00	1,680,000.00
Intercompany	746,000.00	462,000.00	51,000.00
Inventories	6,131,000.00	1,868,000.00	\$21,000.00
Investments—			
Marketable securities	262,000.00		
Stocks of affiliated companies	3,128,000.00		
Land	337,000.00	148,000.00	136,000.00
Buildings, machinery, and		·	·
other property	7,927,000.00	4,026,000.00	581,000.00
Less—Reserve for deprecia-	, ,	<i>.</i>	•
tion	2,163,000.00*	481,000.00*	382,000.00*
Prepaid and deferred charges	233,000.00	17,000.00	19,000.00
•			
Total assets	\$20,161,000.00	\$7,135,000.00	\$3,252,000.00
	<del></del>		
Liabilities—			
Notes and accounts payable—			
Trade	\$ 3,3\$4,000.00	\$2,338,000.00	\$ \$51,000.00
Intercompany	480,000.00	102,000.00	627,000.00
Accrued liabilities	600,000.00	79,000.00	64,000.00
Twenty-year 6% serial bonds	4,800,000.00	10,000.00	0-,000
Capital stock—6% cumulative	- 1 1		
preferred	4,000,000.00		1,000,000.00
Capital stock—Common	4,000,000.00	3,000,000.00	10,000.00
Earned surplus	2,897,000.00	1,616,000.00	700,000.00
Total liabilities	\$20,161,000.00	\$7,135,000.00	\$3,252,000.00
	=======================================		

<sup>\*</sup> Red.

# Summary of Profit-and-Loss Accounts for the Year Ended December 31, 1945

Particulars	X Y Z Corp.	Manufacturing Co.	Distributing <u>Co.</u>
Income—			
Sales and revenue from services-	•		
Outside §	6,721,000.00	\$4,160,000.00	\$5,247,000.00
Intercompany	4.252.000.00		175.000.00

Dividends and other income received	324,000.00	173,000.00	84,000.00
Total income	\$11,297,000.00	\$7,254,000.00	\$5,506,000.00
Expenses—			
Cost of sales and services	\$ 7,829,000.00	\$5,228,000.00	\$3,714,000.00
General, administrative and	•	•	- ,
selling expense	1,336,000.00	824,000.00	1,032,000.00
Taxes	414,000.00	140,000.00	87,000.00
Depreciation	382,000.00	153,000.00	28,000.00
Other expenses	514,000.00	562,000.00	213,000.00
			<del></del>
Total expenses	\$10,475,000.00	\$6,907,000.00	\$5,074,000.00
Net profit	\$ 822,000.00	\$ 347,000.00	\$ 432,000.00

During your examination of the accounts, the following facts are learned:

The XYZ Corp. investment in stocks of affiliates consisted of the following:

Class	Shares	Cost
Common	18,000	\$2,060,000.00
	800	8,000.00
6% cumulative preferred	8,000	960,000.00
Common	1,000	100,000.00
		\$3,128,000.00
	CommonCommon6% cumulative preferredCommon	Class SharesCommon 18,000Common 8006% cumulative preferred 8,000

Manufacturing Co. was organized in 1940 by XYZ Corp. and certain XYZ Corp. officers and stockholders, XYZ Corp. purchasing 40 per cent of the Manufacturing Co. stock at par. Although XYZ Corp. at that time did not have stock control of Manufacturing Co., control of the affairs of the latter company was effected through identical managerial staffs. During 1945, XYZ Corp. purchased an additional 20 per cent of the stock of Manufacturing Co. at a cost of \$860,000.00, which was also the book value of the equity as shown by the subsidiary's records on the date of consolidation. At December 31, 1945, it was decided to include the accounts of Manufacturing Co. in the consolidation of the accounts of XYZ Corp. and its subsidiaries, although up to that time Manufacturing Co. accounts had not been so included.

Additional Distributing Co. stock had been received by XYZ Corp. during the year 1945 through the recapitalization of

Distributing Co. Prior to the recapitalization, the holdings of XYZ Corp. in the stocks of Distributing Co. had consisted of 800 common shares, having a par value of \$10.00, and 3,200 preferred shares, having a par value of \$100.00 per share. The cost of these stocks had been \$8,000.00 and \$960,000.00, respectively. At the date of acquisition, XYZ Corp. equity in Distributing Co. earned-surplus account, as represented by these purchases, was \$640,000.00. The common stock carried voting rights only, having no equity in earnings and being restricted to the receipt of \$10.00 per share upon liquidation or dissolution. The preferred stock was nonvoting, but was entitled to receive all distributions from surplus through dividends or otherwise, and in liquidation or dissolution it was provided that the preferred stockholders should receive distributions to the extent of the par value of their shareholdings prior to any distribution to the common stockholders.

On June 1, 1945, the stockholders of Distributing Co. unanimously agreed to a plan of recapitalization wherein the preferred stockholders surrendered their shares and for each share surrendered received in exchange therefor two and one-half shares of 6 per cent cumulative preferred stock having a par value of \$100.00 per share. It was also provided that, upon dissolution or liquidation, the new preferred stockholders should receive \$100.00 per share plus accumulated unpaid dividends prior to any distributions to the common stockholders. The common stockholders exchanged their old stock share for share for new stock having the same par value and voting rights but entitled to dividends, provided that there were no dividends in arrears on the preferred stock. The common stock was also entitled to all distributions made upon dissolution or liquidation after the payments required to satisfy the preferred-stock provisions.

The increase in the aggregate par value of preferred stock was reflected in the accounts of Distributing Co. by a charge to earned surplus and a corresponding credit to capital account. XYZ Corp. did not make any entries to record the transaction in its accounts.

You are informed that the investment in the capital stock of Development Co. represents 100 per cent ownership of that company. The company was formed to develop certain new manufacturing processes and as yet has not entered upon pro-

duction. The company does not report profit or loss, charging all expenditures to development account. You are told that the accounts of this subsidiary are not to be included in the consolidated accounts. Officers of XYZ Corp. represent to you that the subsidiary is not indebted to anyone other than to XYZ Corp. and that the amount charged to development account at December 31, 1945, was \$135,000.00.

The capital stock outstanding at December 31, 1945, was as follows:

Company	Class	No. of Shares Issued and Outstanding
X Y Z Corp	6% cumulative preferred	40,000
XYZ Corp	Common	40,000
Manufacturing Co	$\dots$ .Common	30,000
Distributing Co	6% cumulative preferred	10,000
Distributing Co	$\dots$ Common	1,000
=		

All of above shares had a par value of \$100.00 except the \$10.00-par-value common shares of Distributing Co.

XYZ Corp. paid two quarterly dividends in 1945, constituting payment of all preferred dividends accumulated to July 1, 1945. Distributing Co. also paid two quarterly dividends on its new preferred shares, disposing of dividends on that stock to November 30, 1945. In addition, Distributing Co. paid a dividend of \$100.00 per share on its new common stock on November 30, 1945. All dividends received by XYZ Corp. have been credited to income.

Included in intercompany accounts receivable of XYZ Corp. is an amount of \$50,000.00 owing from Development Co.
The 20-year 6 per cent serial bonds mature \$400,000.00 an-

nually on July 1.

Consolidated earned surplus balance at December 31, 1944. was \$2,353,400.00.

You are instructed to submit consolidating working papers and journal entries necessary to prepare a consolidated bal-ance sheet and summary of consolidated profit-and-loss account. It is suggested that your working balance sheet and profit-and-loss account be prepared as in the above tabulation, allowing one column for each company and arriving at a combined total. Immediately to the right of the "combined" column should be two columns, debit and credit, for the posting of journal entries, and to the right of these two columns should be a column "consolidated, as adjusted."

Journal entries to effect elimination should be assigned letters to distinguish them in the journal-entry columns.

In addition, you should prepare an analysis of consolidated surplus account for the year 1945.

Also indicate such footnotes or explanatory data as you would place on the consolidated balance sheet and profit-and-loss account if you were required to submit a report for distribution to investors and creditors.

#### PROBLEM 125

#### REORGANIZATION ENTRY

At December 31, 1945, the dividends in arrears on the three classes of \$100-par preferred stock of X Company amounted to \$6,049,171.00, as follows:

Class of Preferred	Outstanding Shares	Dividends in Arrears
51/4%	924	\$15.375
6		17.625
8 (callable at 110)		23.50

As at April 1, 1946, all preferred stockholders agreed to exchange their holdings at par plus their claims on dividends and premium to date for a new issue of 5 per cent \$100-par preferred stock of one class which is to be listed at once on the exchange. It was further agreed that they accept the new stock at par, plus cash for fractional-dollar claims per share, for the par of their old holdings plus the amount of their dividend claims.

Prepare a journal entry to record the recapitalization.

#### PROBLEM 126

## COMPUTATION OF RETAIL INVENTORY

A summary of entries in the inventory account of a department in a retail store for the month of October was as follows:

Purchases, October, at invoice cost	87,576,17	
Freight	3.984 13	
Loading charge	6.130.33	
Markup on purchases	65,127.09	
Markdowns	•	\$ 13,862.10
Cancellations of markdowns	5.783.42	• -0,0020
Net sales, October	-,	122,562,18

You are called upon to compute the book inventory at cost at October 31. Cost is to be estimated invoice cost plus freight of 5 per cent; cost of sales for the month is to be determined by subtracting from sales plus net markdowns, an average markup as at the end of the month computed on the basis of total merchandise handled; that is, without reference to sales or markdown adjustments made during the month.

#### PROBLEM 127

## APPLICATION OF FUNDS

From the following information prepare a statement of application of funds of A, B, and C for the year ended June 30, 1946:

A, B, AND C (A PARTNERSHIP) Preclosing Trial Balances—June 30, 1945 and 1946

	June 30	
Debits	1945	1646
Inventory at beginning of year. Repossessed merchandise. Installment receivables. Cash. Investments. Office equipment. Reserve for depreciation. Goodwill Purchases for year. Expenses. Partners' withdrawals.	\$ 17,384.67 2,115.36 26,265.41 32,001.04 10,727.62 8,447.00 2,347.00* 5,000.00 68,322.53 15,552.94 22,500.00	\$ 24,865.59 6.544.56 30,598.03 23,000.87 8,399.73 9,457.00 3,072.00* 6,500.00 64,123.43 28,329.61 25,000.00
Total debits	\$205,969.57	\$223.746.82
Credits  Sales  Profit on investment sold  Service charges  Notes payable, long-term  A	\$122,507.25 6,962.32 14,500.00 20,000.00	\$120,359,38 3,251,00 7,386,44 42,750,00 25,000,00

B C		25,000.00
Total credits	\$205,969.57	\$223,746.82

<sup>\*</sup> Red.

The inventory at June 30, 1946, was \$28,357.52. Repossessed merchandise account, unadjusted for years, has been charged with balances of installment accounts covering items recovered and is credited with sales; the balances at the beginning and end of the year ending June 30, 1946, on the basis of resalable merchandise should have been \$1,105.86 and \$5,242.-57, respectively.

Installment receivables have an average life of 9 months. The service charges are credited to income when the accounts are booked.

Certain long-term investment securities were sold during the year; none were purchased. Sales of office equipment, amounting to \$435.00, were credited directly to the asset account, and the balance, \$920.00, of the original cost was charged to depreciation reserve. Partners' withdrawals include regular salaries of \$15,000.00, the balance being regarded as withdrawals of profits.

Notes payable retired during the year amounted to \$10,000.00.

Expenses for the year include the goodwill account at the beginning of the year. The goodwill account now on the books represents the amount paid in cash to retiring partner C over and above his investment. Book profits remaining at the end of each year are distributed in cash on July 15. During the year, A paid B \$5,000.00 in cash in order to equalize their investment accounts.

## PROBLEM 128

CASH STATEMENT FROM BALANCE SHEETS

From the information following, prepare a summary by principal classes of accounts, of—

(a) Cash receipts and disbursements, showing—
 Liquidation of gross assets acquired at inception.
 Collections of current income.
 Miscellaneous receipts.

Reduction of liabilities assumed at inception.

Payment of current expenses.

Miscellaneous.

Balance, representing cash in bank as at September 30, 1946.

(b) A reconciliation of net income with the excess of current cash income over current cash expenses as summarized in (a), with notations of the principal balance-sheet-account sources of the noncash income or expense.

Appended are the balance sheets of Successor Realty Corporation as at September 30, 1945 (date of inception), and as at September 30, 1946—

Assets	Sept. 30, 1945	Sept. 30, 1946
Cash in bank		\$ 15,257.37
Receivables— Lessees	\$ 30,109.50	26,087.62
Mortgages	6,156.07	6,091.94
Installment contracts	1,214.08	726.15
Escrow deposit	8,350.00	10,400.00
Mortgages	236,050.00	196,000.00
Installment contracts	40,622.97	28,766.68
Sundry	500.00	2,150.00
Prepaid insurance and franchise taxes	2,512.04	5,183.16
Improved real estate	1,263,078.19	1,275,561.48
	\$1,588,592.85	\$1,566,224.40
Liabilities		
Account payable and accrued payroll		\$ 2,012.76
Accrued real-estate taxes	\$ 59,860.94	33,876.27
Deferred rental income	1,537.80	1,275.00
Mortgages	85,762.00	78,252.00
Installment contracts	18,715.97	12,362.84
Receivables	29,502.67	28,909.72
Reserve for depreciation on improved real	•	,
estate		15,819.20
Capital stock	10,000.00	10,000.00
Paid-in surplus	1,383,213.47	1,383,213.47
Earned surplus		503.14
	\$1,588,592.85	<u>\$1,566,224.40</u>

Earned surplus represented net income for the current year, as shown by the following summary of income and expenses—

Particulars		Amount
Income— Rentals of improved real estate Interest on—	\$ 60,262.99	
Mortgages\$13,627.14 Installment contracts\$2,586.40 Sundry investments\$42.50	16,256.04	
Profit on sale of sundry invest- ments	155.00	\$76,674.03
Expenses—	• • • • • • • •	
Salaries and wages		
Taxes and insurance	9,910.94	
terest	3,000.00	
Depreciation on improved real estate	15,819.20	
Other expenses	25,814.95	76,170.89
Net income		\$ 503.14

Postings from the cash-receipts-and-disbursements books for the year have been summarized therefrom thus—

Particulars	Receipts	Disburse- ments
Receivables—		
Lessees (notes and accounts)	\$ 62,497.33	\$ 2,911.53
Accrued interest on—		
Mortgages	10,969.22	
Contracts	1,756.41	
Investments—		
Mortgages	22,040.00	
Installment contracts	4,503.16	
Sundry	355.00	
Prepaid insurance and franchise taxes, of which		
\$3,157.80 applies to future periods		3,235.92
Accounts payable ("other expenses") and ac-		
crued payroll		46,177.99
Accrued real-estate taxes (1944 and prior)		34,580.81
Interest on sundry investments	42.50	
Total gross charges and credits, respec-	_	
tively, to cash in bank	\$102,163.62	\$\$6,906.25

The receivables as at September 30, 1946, include the following current-year uncollected income—

Account	Amount
Lessees	\$1,592.\$1
Accrued interest on—	<b>4</b> - <b>,</b>

Deferred rental income, both at the beginning and end of the year, represents rental income for the succeeding month.

Included in accounts payable is an item of \$750.00 representing an insurance premium charged to unexpired-insurance account.

#### PROBLEM 129

# JOURNAL ENTRIES FOR STATUTORY MERGER

A statutory merger has been effected between Companies A. B. and C, and you have been asked to draft the journal entries for A as at October 31, 1946, in order to reflect the changes in the accounts made necessary by its acquisition of the net assets of Companies B and C, and to prepare a balance sheet of Company A after giving effect to these entries. Changes in surplus, on the consolidated basis, should appear on the balance sheet.

At the date mentioned, the financial position of the companies was as follows:

Assets	<u>4</u>	<u>B</u>	<u>c</u>
Investment in A	189,463.26	\$ 15,275.00	10,740.00
Investment in C	254.011.50 \$4,795.33 6,300.00		60.72
Other assets	686,577.39	336,371.57	374.198.40
	\$1.221.147.48	\$351,646.57	\$3\$4.999.12
Liabilities			
Trade creditors.  Accrued interest on bonds  5° bonds outstanding.	\$ 241,546.93 2,500.00 150,000.00	\$ \$1,387.4\$	\$ 63,273.43
Intercompany accounts	346.52 750,000.00	25,366.S1 200,000.00	59,142.72 350,000.00
Balance January 1, 1946 Net profit, 10 months Cash dividend, July 1	75.240.52 31.513.51 30.000.00*	34.5\$6.35 10,305.93	\$4,095,25* 3,321,78*
-	\$1,221,147,48	\$351.646.57	\$384,999.12

<sup>\*</sup> P.~--

The following particulars are given you:

<sup>(</sup>a) A's investment in B was acquired by cash payments to

B's stockholders as at January 1, 1934, and consists of 90 per cent of the capital stock of B Company; the surplus of B was then \$30,357.18. Earnings since have been \$62,535.10; and dividends paid, \$48,000.00.

- (b) A's investment in C is a 100 per cent interest purchased as at January 1, 1944. The deficit of C on that date was \$\$7,300.34; a net profit of \$4,469.52 was earned in 1944, and a net loss of \$1,264.43 was sustained in 1945.
- (c) B's investment in A was purchased on the market in 1931 (the market on January 1, 1934, was \$180.00 per share); it consists of 200 shares of A's 7,500 outstanding shares of capital stock, including a stock dividend of 100 per cent paid by A on December 31, 1935, and is valued at original cash outlay. These shares will be canceled and retired as at October 31.
- (d) C's investment in A's bonds, 1949 series, consists of 10 \$1,000.00 coupon bonds, purchased at market on January 1, 1946. Coincident with the merger, the bonds have been canceled and cannot be reissued. A's bonds mature as follows:

Date of Maturity	Amount
June 30, 1947	\$50,000.00
June 30, 1949	50.000.00
June 30, 1951	50,000.00

The bond discount has been prorated on the basis of prospective interest payable, but no amortization has been made as yet for the year 1946. No interest receivable has been accrued by Company C since the June 30 semiannual coupon.

(e) The 200 minority shares of Company B are to be purchased for cash at book value as determined by you, B's investment in A remaining unchanged for the purpose of the purchase.

Consistently since the acquisition of its subsidiaries, Company A has presented consolidated financial statements to its stockholders.

# PROBLEM 130

# ADJUSTMENT OF MUNICIPAL STATEMENT

From the following balance sheet prepared from the books and sent you by the auditor of the City of Sharon, prepare a reconstructed and adjusted statement, following nomenclature, classification, and other practices which you believe express the best principles of municipal accounting: and append to

Taxes belonging to next year, collected in advance.  General reserve (for working capital), created in 1935 Income (interest, net) of special assessment fund  Special assessment bonds unpaid, \$5,000.00 past due\$55,000.00 Interest accrued thereon2,318.73	1,000.00 50,000.00 50.02
\$57,318.73	
Less—Cash collected and held in bank for bondholders	52,946.33
Surplus of resources—Balance July 1, 1945.	1,178,042.47
Total liabilities	\$1,405,528.49

#### PROBLEM 131

## STATEMENT OF JOINT VENTURE

F, G, and H enter into an agreement with a farmers' marketing association to dispose of the peach crop of its members. The three individuals will act jointly as the agent of the association, will share equally in income accruing to them as agent, and will be compensated as follows: \$500.00 each, plus onethird each in a bonus based on the net yield to the association. "Net yield" is defined in the agreement as "selling price less freight and commission-dealers' commission and expenses and less compensation to parties of the second part  $(F, \bar{G}, \text{ and } H)$ ." The contract further specifies that if "the average net yield is greater than \$1.00 per bushel," the bonus will be "10 per cent of the net yield above \$1.00, 1 per cent of the net yield above \$1.1214, and additional 1 per cents, up to a maximum of 10 per cent, of successive 1215-cent additions to such net yield, it being contemplated that said bonus shall in no event exceed 20 per cent of the net yield above \$1.00."

You have been called upon to prepare a statement for presentation to the association, based on your interpretation of the contract, showing the profit to the association and the amount of cash to be paid to each of the three individuals. The crop amounted to 152,564 bushels, and was sold by F, G, and H to commission dealers at an average selling price of \$2.20 from which the dealers deducted commission of 6 per cent, freight of \$14,713.20, and expenses of \$3,289.35. Out of the net proceeds (which were remitted direct to the association), advances were made to F amounting to \$8,000.00 and to G, \$2,500.00.

#### PROBLEM 132

## PROFIT-SHARING FORMULA

A, B, C, D, and E are partners in a mineral venture, each having a different interest. E, the owner of the land, receives a  $\frac{1}{15}$  share of monthly receipts. D, the promoter, receives  $\frac{1}{16}$  of the monthly receipts and  $\frac{1}{15}$  of the excess of monthly receipts over expenses including E's share but none of the others' or his own. C, who has supplied most of the operating capital, receives in lieu of interest a monthly return of \$1,000 and  $\frac{1}{15}$  of the excess of monthly receipts over expenses including both E's and D's shares but none of the others'. A and B distribute whatever remains,  $\frac{2}{15}$  and  $\frac{3}{15}$ , respectively.

The receipts for July, 1942, were \$25.261.20; and the expenses (before deducting shares), \$14.385.45. Compute the share each is to receive.

Prepare a simple formula for each share that may be applied directly to each month's receipts and expenses.

#### PROBLEM 133

# MARKUP COMPUTATION

Following is a list of the debit and credit items in the inventory account of the men's-wear section of a department store for the month of September. 1946:

Balance September 1, 1946, representing inventory at retail	\$158,821.38
Scles	66.901.68
Purchases for September, at invoice cost (before discounts)	33,000.00
Freight-ia	1.334.85
Discounts on purchases.	1,950.27
Markup on purchases	26,179.20
Markdowns	8.389.31
Cancellations of markdowns	2,264,30
Proportion of warehouse and purchasing overhead	
Returned sales.	1,577.25

Included in the opening inventory and included in the price of all items added to stock during the month is a gross profit of \$2 per cent based on "cost." and in "cost" has been included an estimate for freight of 1 per cent and from "cost" has been excluded an allowance for discount of 4 per cent based on such cost-plus-freight. However, the average of these two items for the past year or more has been 4 per cent and 6 per

cent, respectively, of invoice cost, and you will be expected to correct the opening inventory in accordance with this average. Also to be included in the corrected cost of the merchandise inventory at the beginning of the month is an addition of 5 per cent of actual cost for warehouse and purchasing expense.

Recompute the markup, based on retail price, and determine the estimated cost of merchandise on hand at September 30.

# PROBLEM 134

# FINANCIAL STATEMENT FOR BONDHOLDERS

You are requested to prepare a suitable statement of assets and liabilities of the XYZ Bondholders' Committee for the XYZ Transit Company. Your statement is to cover all transactions of the Committee during the period from January 1, 1937, the date of its inception, to June 30, 1946.

The records of the Committee are kept on a cash-receiptsand-disbursements basis. From them, you derived the following information:

Cash receipts:	
Proceeds of notes payable to the depositary, the A Trust	
Company	\$440,000.00
Contributed by the XYZ Transit Company to the Com-	•
mittee's expenses	38,500.00
	\$478,500.00
Cash disbursed:	<del></del>
Depositary fees	\$106,000.00
Fees to attorneys of the Committee	45,000.00
Fees to Committee members	7,850.00
Salary of secretary of the Committee	15,000.00
Interest on notes payable	132,500.00
Listing of certificates of deposit on the Stock Exchange	58,000.00
Advertising, interest, principal payments, etc	37,825.00
Printing and stationery	29,850.00
Mailing and postage	15,675.00
Sundry Committee expenses	8,675.00
Clerk hire	5,925.00
	\$462,300.00
Deposited with the A Trust Company	\$ 16,200.00

Other information discovered by you in the course of your examination included the following:

(1) Certain liabilities of the Committee were unpaid at June 30, 1946; these were—

Interest on notes payable for year ended June 30...... \$ 26,400.00 Depositary fees and expenses for the period January 1, 1946, through June 30, 1946..... 8,379,26 Fees to Committee members and attorneys...... Undetermined

(2) The notes payable to the A Trust Company bear interest at the rate of 6 per cent, are due on demand, and are secured by \$58,000,000.00 6 per cent bonds of the XYZ Transit Company held by the A Trust Company as depositary.

(3) Of \$60,000,000.00 6 per cent bonds of the XYZ Transit Company outstanding, a total of \$58,000,000.00 has been de-

posited with the Committee.

(4) The XYZ Transit Company has made payments on principal totaling 35 per cent since January 1, 1937. Interest has been paid to date. Principal and interest payments have passed directly from the Transit Company to the bank, as trustee, and thence to the original bondholders.

(5) The depositary agreement provides that expenditures of the Committee are to constitute a first lien against deposited

securities to the extent of 1 per cent thereof.

(6) The agreement also provides that title to the bonds deposited with the Committee passes to the Committee. Certificates of deposit equal in face value to the bonds have been issued to the depositors.

## PROBLEM 135

# STATEMENT OF EXECUTOR

Samuel Ganser died on July 18, 1945, and Abram Effort was appointed executor under the will. The executor in July 1946, having paid off certain specific bequests and having satisfied all creditors, asks you to prepare a single comprehensive statement for him as of June 30, 1946, suitable for presentation to the court in a final accounting. If the statements are approved by the court, the executor will ask for his discharge and will turn the remaining net assets over to a trustee named in the will for the benefit of the widow and other heirs. The executor anticipates no transactions after June 30.

An inventory of the estate was filed with the court on

August 15, 1945, consisting of the following items:

Cash in First National Bank	\$ 4,533,12
Cash in closed bank	2,050.50
Real estate, valued by court appraiser at	38,750.00
Home furnishings	6.824.00
Stocks, at market 7-18-15-	-7
AB Company preferred	22,865.00
AB Company common	3,738.20
Parkhurst Transit Co. Common, at nominal value	100.00
U. S. Savings Bonds, dated 4/1/45; due 4/1/55 in the	
amount of \$50,000.00	37,500.00
Accrued interest @ 2.9%	326.25
	\$116,687.07

Accrued property taxes at the date of death, now shown in the inventory presented to the court, were \$1.575.20. A dividend of \$1,250 from the AB Company, declared on June 1 to stockholders of record on that date, was not recorded until its receipt in August.

In September 1945, discovery was made of another checking account in the Second National Bank amounting to \$2,500.00, and cash in office safe, \$125.50; these two items were deposited in the regular bank account. During that month the funeral expenses of \$750.00 were paid and also all household debts owing on July 18 amounting to \$2,111.00.

Other receipts during the period of administration consisted of rents, \$2,126.00; dividends, including those accrued at the date of death, \$4,025.00; life-insurance proceeds, \$5S.-000.00; sale of Parkhurst Transit Co. common. \$200.00; collection on deposit in closed bank, \$465.00; sale of one-half of preferred stock, \$13,500.00.

Disbursements during the same period were: specific bequests, \$20,000.00; estate tax \$18.262.50; allowance to widow, \$4,800.00; property taxes, including those accrued at death, \$3,336.95; executor's fee, specified in will, \$1.000.00; court costs, \$88.50; funeral expenses and household debts, as above.

The annual interest rate on U. S. Savings bonds, 2.9 per cent, may be assumed to be correct.

#### PROBLEM 136

## BALANCE-SHEET REVIEW

In your audit for the calendar year 1946 of the Exemplar Products Company and its subsidiaries you encounter a number of problems which you must resolve. These problems are stated in the following paragraphs. You are required to set forth as concisely as possible (a) the gist of the problem, (b) the accounting principle involved, and (c) your proposed solution. If additional facts are needed for your solution, assume and list them.

- (1) A possible asset in the consolidated balance sheet is the unamortized bond discount relating to the outstanding funded debt of a wholly owned subsidiary. All of the bonds are now in the possession of the parent company, having been purchased during the past year from individual bondholders at par after securing a 100% interest in the subsidiary's outstanding stock.
- (2) An arm's-length exchange of property was made during the year with an unrelated member of the same industry. A warehouse was taken in exchange for an unused plant which had cost \$40,000 twenty years ago and on which depreciation of \$18,000 had been accrued up to the date of the exchange. The warehouse acquired had cost its owner \$32,000 ten years ago and depreciation of \$6,000 had been accumulated against it; the owner had received two cash offers of \$16,000 and \$18,000, respectively, just before the exchange. A local realestate appraiser had recently put a value of \$25,000 on this warehouse.
- (3) The accrual basis of accounting is followed except that interest has not been accrued on an investment in a note receivable which has been on the books for several years. The note is dated June 30 and on that date, each year, interest of \$8,000 has been received.
- (4) A contract has been entered into between the parent company and its president whereby he may acquire at a cost of \$10 per share 50,000 no-par-value shares of common capital stock during the next five years; the maximum acquisition during any one year is 10,000 shares. At December 31, 1946, the market price of the stock was \$24 per share.
- (5) A reserve for contingencies amounting to \$500,000 was set aside out of earned surplus on August 1, 1945, in accordance with a resolution of Board which stated its purpose to be "a reservation of profits to provide for the possible loss from liquidating the Berlin sales branch." On December 15, 1946, most of the amount owing from the Berlin office, \$180,000,

was charged against the reserve, a balance of \$25,000 remaining on the books as a receivable at December 31, 1946, "against which possible offsetting funds of \$10,000 frozen in the U. S. Treasury during that month may eventually be realized."

#### PROBLEM 137

#### INCOME-TAX ITEMS

Indicate briefly how the following items should be reported in the Federal income-tax return of an individual:

- (1) 1,000 shares of the capita stock of the corporation of which the individual is the president. In the authorizing resolution of the Board these shares are referred to as additional compensation covering the past three years, but their delivery to the president is contingent upon his remaining with the corporation for 5 years.
- (2) (a) 100 shares of the common capital stock of B Company which went through bankruptcy and dissolution during the year; no assets were left for common stockholders.
- (b) 100 shares of the common capital stock of C Company whose financial position is hopeless; the common stockholders on dissolution may receive only a few cents on the dollar.

Are these items subject to the rule limiting capital losses?

- (3) What limitations attach to the deduction of charitable and other contributions from taxable income?
- (4) The receipt of title to a farm plus \$1,500 in cash in exchange for a city home. The cost of the city property was \$10,000 three years ago and the farm property has an acknowledged fair value of \$12,000. What is the cost basis (for tax purposes) of the new property?
- (5) Taxes paid: automobile licenses, city and state; state and Federal gasoline taxes; sales taxes; personal-property tax; state and Federal income taxes; Federal dues tax; import duties; state liquor tax; Federal old-age-benefit contribution; postage.

#### PROBLEM 138

## CHANGES IN PROFIT

Boylston Manufacturing Company has prepared the following summary of its profits for the calendar years 1945 and 1946. From this summary and accompanying information you are asked to prepare a concise analysis that will show the principal causes of the decline in gross profit in 1946 for each of the three products manufactured as compared with the gross profit of the preceding year.

	1945	1946
Net sales Product A	\$100,000.00	\$120,000.00
B		40,000.00
C	25,000.00	25,000.00
	<del></del>	<del></del>
Total net sales	\$175,000.00	\$1\$5,000.00
Factory cost of sales	105,000.00	148,000.00
Gross profit	\$ 70,000.00	\$ 37,000.00

Upon analysis you find that factory cost can be broken down as follows:

					Cost o	f Sales		
	Unit	s Sold		1945			1946	
	od- et <u>1943</u>	1946	Ma- terial	Labor	Over- head	Ma- terial	Labor	Over- head
A B C	590 2,500 1,000	600 1,600 1,250	\$40,000 10,000 16,000	\$10,000 5,000 9,000	\$10,000 5,000	\$60,000 13,000 10,000	\$15,000 10,000 15,000	\$15,000 10,000

The quantity and quality of raw materials entering into each product have remained unchanged.

No work in process was on hand at the beginning or end of either year.

Scrap from the fabrication of Products A and B is the raw material for Product C. Product C has been treated as a byproduct and the cost of raw material entering into it has been regarded as an amount equal to its selling price less the direct labor expended in making it a marketable product; this "cost" has been credited  $\frac{4}{5}$  and  $\frac{1}{5}$ , respectively, to the material costs of Products A and B, for the reason that the proportion of scrap materials from the fabrications of the two major products has been 4 to 1.

Because of the confusion that would otherwise enter into the comparison, you have been instructed to regard the cost of raw material in each unit of Product C manufactured and sold during both years as SS and to redistribute overhead to the three products on a direct-labor-cost basis.

#### PROBLEM 139

## CHANGE IN CURRENT-ASSET POSITION

From the information that follows prepare a summary statement that will account for the improvement of \$322,-621.79 during 1945 in Q Company's current-asset position. This statement may be made to resemble a statement of application of funds, except that instead of a fund total of current assets less current liabilities you are to use total current assets. You are instructed to prepare your statement from the accounts as they are reflected in the comparative balance sheets, without adjustments, if any, that would conform them, in your opinion, to proper accounting principles.

#### O COMPANY

December 31

Ralance Sheets

Balance Sheets	December 31		
Assets	1944	1945	
Cash Receivables, net Inventories, net Bonds, at cost Property accounts, net Goodwill	234,086.22 97,463.71 2,000.00 475,691.52	\$ 86,972.41 321,784.12 288,668.99 \$4,200.00 863,474.33 1.00	
Total assets	\$1,034,695.25	\$1,645,100.85	
Liabilities			
Merchandise creditors. General-expense accruals. Accrued property taxes and interest. Accrued income taxes. 5% bonds, payable in 1953. RFC long-term loan. Common stock, 10,000 shares. Treasury stock, 240 and 370 shares. Paid-in surplus. Earned surplus. Total liabilities.	40,531.43 24,385.12 10,568.05 115.000.00 100,000.00 500,000.00 12,000.00* 100,000.00 117,469.72	\$ \$2,6\$2.16 50,374.8\$ 3\$,963.03 263,430.83 500,000.00 500,000.00 18,500.00* 30,000.00 19\$,149.95 \$1,645,100.85	
* Deduction.		Year Ended	
Income Statement		Dec. 31, 1945	
Sales		\$8,540,672.31	
Cost of sales	• • • • • • • • • • • • • • • • • • • •	\$6,638,916.40 1,422,932.82	

Property taxes and interest	
Total expenses	\$8,364,243.08
Net profit	\$ 176,429,23

- (a) A reserve for bad debts of \$8,650.42 at January 1 was increased by the amount of \$15,000 charged to general expenses and collections of \$2,005 on 1944 accounts previously charged off; and decreased by charge-offs of all remaining 1941 accounts, amounting to \$7,270.00, and of 1942 accounts amounting to \$1,504.20.
- (b) The two bonds of \$2,000, acquired in the settlement of an account receivable, and on hand at the beginning of the year, were sold. Bonds of other corporations purchased during the year were still owned at the end of the year and had a readily realizable market value of \$\$5,500.00; they represented RFC funds available for the purchase of new equipment or for working capital.
- (c) At the end of 1944 an inventory reserve of \$25,000 was created by a charge to earned surplus, representing a provision against price declines on obsolescent manufactured products on hand; on the balance sheet it was applied in reduction of the year-end inventories. In 1945, based on facts then first apparent, writedowns of \$15,000 in finished-product costs were carried to the reserve and the balance of \$10,000 was put back in earned surplus. At the end of 1945 a reserve of \$40,000, similar in character, was spread on the records and financial statements, but the charge was made to general expenses.
- (d) Financed mostly through a new RFC loan on February 1, additions of \$451,023.74 were made to the company's warplant facilities. The old loan of \$100,000 outstanding at the beginning of the year was consolidated with the new loan; the latter is payable in 10 equal annual installments, commencing February 1, 1946, with interest at 315 per cent.
- (e) Depreciation and amortization of \$56.740.93, provided during 1945 and charged to general expenses, were added to the depreciation reserve of \$123.461.51 at the beginning of the year. Certain machinery belonging to the company which had cost \$7,962.31 was disposed of in September 1945 in ex-

change for 130 shares of the company's own stock; the excess over par value was charged to the depreciation reserve.

- (f) Goodwill was reduced to the nominal amount of \$1 during the year by a charge of \$50,000 to paid-in surplus, the balance being carried to earned surplus; it had been set up originally at the establishment of the company by a credit to paid-in surplus, but within a few years the normal peacetime activities of the company had completely altered. At December 31, 1945, the company's output had again been changed, approximately 60 per cent of the year's business having been the manufacture of munitions.
- (g) Paid-in surplus was further reduced during the year by cash bonuses of \$20,000 paid to officers and employees and relating to 1944 operations; the charge was authorized in April 1945 by the Board of Directors.
- (h) The outstanding 5 per cent bonds were repurchased at 105 and canceled.
- (i) A 5 per cent cash dividend was paid on June 30, and a like amount on December 31; the portion relating to treasury stock was credited to General Expenses.

# PROBLEM 140 RECONSTRUCTED FINANCIAL STATEMENTS

Reconstruct the balance sheet of the Q Company (Problem 139) at December 31, 1945, and the income statement for the year then ended, following accounting principles you believe to be correct; you are to assume that you have secured the company's agreement thereto. The statements you prepare will be used in the company's annual report to its stockholders. At the points, if any, where the problem does not provide enough information to meet your needs, you may expand the form and indicate by means of footnotes the kind of data you require: but do not include in the statements any figures not derived from those appearing in the problem.

Comment briefly on the propriety of the accounting procedures reflected in each of the lettered paragraphs of Problem 139.

# PROBLEM 141 Accounting Principles

Following are quotations from published articles. They relate to accounting practices which in actual situations have

been resolved in different ways. You are required to explain the quotations; to list the varied methods by which the item is commonly handled; and in each case to select, and give reasons for your choice of the method you would like to see established as a general rule.

(a) "The corporation's real-estate taxes... were accrued

in full on the day they became a lien on the property."

(b) "This absorption of the operating deficit by canceling it along with an equal amount of surplus paid in by preferred stockholders has been dubbed by the SEC as a quasi-reorganization; in the case of the . . . company [whose securities are listed on the New York Stock Exchange] it was accomplished by a resolution of the Board."

(c) "The Supreme Court has held that where bonds... [are exchanged] for a new issue... the remaining unamortized expenses and... [those] of the new issue should be amortized

throughout the term of the new bonds."

(d) "Dividends from surplus prior to acquisition have been the source of distribution to top-company stockholders."

(e) "This policy [of setting up reserves out of profits for future losses] has the effect of leveling out net income over the good and bad years but it has always been rejected by the tax authorities."

## PROBLEM 142

## BOOK VALUE OF STOCK

Q and R, the two stockholders of the QR Company, in 1940 entered into an agreement which reads in part as follows:

"In the event of withdrawal from the company or death of either party, the remaining party shall cause the corporation to issue, in exchange for all the preferred and common stock then held in the name of the withdrawn or deceased party, a noninterest-bearing note (payable to the withdrawn party or the deceased's estate in equal cash installments over a period of ten years) in an amount equal to book value, which shall be determined (in accordance with prevailing accounting principles) by a Certified Public Accountant of recognized standing..."

You have been asked to make the determination, in terms of book value per share, of the preferred and common stock at March 31, 1945, the date of Q's death, and to show the portion

of the book value that relates to 1945 profits. Q owned 2,100 shares of preferred stock (1,500 shares purchased from the company in 1934 and 600 shares in 1941) and 600 shares of common stock (250 shares purchased from the company in 1925 and 350 shares from R in 1937, the latter at \$60 per share).

Net worth, substantially as reflected in the company's latest but unaudited balance sheet (at December 31, 1944), follows:

Preferred stock, no par value; issued— 2,000 shares (in 1934)	\$ 322,000.00
(Preferred dividends, which are cumulative at the rat of \$5 per share per annum, have been paid throug December 31, 1943.)  Common stock, no par value; issued—	e h
500 shares (in 1925)	
Appreciation reserve (original amount in 1930, \$186,000; less 5% per annum since January 1, 1931)	55,800.00
1, 1945, a deduction of \$\$,500 was to be made monthly for each of 16 months from amounts otherwise due from War Department for goods sold to it)	250,000.00
Reserve for war-plant amortization (permitted as a deduction from income on Federal income-tax returns)  Reserve for loss on inventory realization (unchanged since	85,440.00
1940); inventories now valued at lower of cost or market Reserve for 1944 income taxes (of this amount, upon the preparation of the company's return in March, 1945, \$25,100 was needed to increase the accrued liability,	,
shown under current liabilities, to the amount of the tax due on 1944 net income)	100,000.00
relates to a 20-year \$400,000 bond issue)	179,350.00
100 plus accrued dividends on June 30, 1944  Earned surplus	30,750.00* 340,900.00
Total	\$1,482,740.00

<sup>\*</sup> Red.

Additional data have been collected by you as follows:

<sup>(</sup>a) Net profit per books for the three months ended March 31, 1945, were \$26,250.00, after deducting (1) \$21,360.00 for

in 1933 and had cost the W Company \$25,248.30. Salvage from the retirements, yielding \$2,525.00, had been credited to miscellaneous income for 1940.

- (b) Commencing with the year following completion, composite annual depreciation of 5% had been taken on the books of W Company (\$27,693.9\$ for 1942) on the basis of engineers' estimates of 20 years' continuous useful life. At the end of 1953 it is planned to give the plant a residual value of \$25,000 (\$20,000 before the 1935 additions), which it is estimated it will ultimately yield as salvage, and to hold it as standby equipment, without further depreciation, in meeting occasional peak loads or other emergencies. The amount of W Company's depreciation reserve on this generating plant at December 31, 1942, was \$225,018.71.
- (c) Maintenance charges billed by V Company to W Company during 1942 amounted to \$22,440.00, and during previous years, \$163,900.00.
- (d) All plant and maintenance work performed for W Company by V Company has been billed at cost to V Company plus 10 per cent.

You are required to correct the accounts and to prepare a statement showing the computations of the eliminations necessary in the consolidated financial statements of the S Company and its subsidiaries at December 31, 1942, and for the year ended on that date Depreciation is to be spread equitably over the 20-year period indicated, beginning with the year following the installation. The construction profit is to be recognized in consolidated income only as the related assets are realized through depreciation or disposition.

# PROBLEM 144 BRANCH ACCOUNTS

You have been asked to examine as at April 30, 1943, the accounts of a sales-and-service branch of the Facile Vacuum Cleaner Company, located in Coatesville. The local manager has admitted diverting to his own use as a "temporary loan" collections on accounts receivable amounting to \$1.275.-23, but denies any further peculations. You find that the general ledger and certain other records have not been kept during the past year; the manager asserts that this omission

was wholly in the interest of saving expenses during a year of curtailed activities. The branch sells and services household equipment on both a credit and cash basis.

The branch books were audited at April 30, 1942, at which time the accounts, as adjusted, showed the following balances:

	Debit	Credit
Cash in bank, remitted May 5, 1942.   Customers' accounts. Customers' notes. Inventory at retail. Equipment ledger.	14.981.20	
Office expenses payable.  Accrued payroll.  Home office.		\$ 3,240.18 2,125.00 102,298.43

On the books of the home office, an analysis of the account with the branch has been made as follows:

<u>Detail</u>	Amount	
Balance May 1, 1942	\$102,298.43	
Merchandise shipped to branch, at branch selling prices.	\$8,592.73	
Shop equipment purchased for branch, at cost	2,453.15	
Remittances for payment of branch outside purchases.	34.834.68	
Markup of outside purchases to retail	11,611.56	
Salary of branch manager (in full for year paid directly by home office)	3,850.00	\$243,640.55
Less credits—		
Cash received from branch	\$103,192.60	
Shop equipment retired, at original cost	2,500.75	
Bad debts approved for writeoff	\$25.77	106,519.12
Balance April 30, 1943		\$137,121.43

Your inspection of the branch records is made on May 1, 1943. In addition to cash in bank of \$12,454.20, you find cash on hand of \$134.00 which was the balance in a change fund of \$500 established during the year; withdrawals by employees account for the difference and were made against the accrued payroll of \$2,565.00 at April 30, 1943. A list of outstanding receivables at April 30, 1943, verified by telephone calls to customers, totals \$16.248.29, not including estimated uncollectible items of \$675.33 still on the books, and not including uncollectible receivables of \$825.77 from the previous year

which have been written off. One-half of the customers' notes outstanding at the beginning of the year was collected; the balance is considered good. Purchases of merchandise whether through the home office or from the outside are taken into stock by the branch at the retail sales price and inventories are priced on the same basis. The warehouse inventory, at retail, on April 30, 1943, you find to be \$22,461.40; this amount includes outside purchases of \$1.530 (cost: \$2.040 retail) for which the home office has as yet made no remittance. Shop and office equipment is purchased through the home office which maintains depreciation reserves for them. In addition to the unpaid payroll and unpaid outside purchases, mentioned above, office expenses unpaid at April 30, 1943, amount to \$3,437.25. From a voucher record and other sources you determine that total payments during the year made directly by the branch for payroll amounted to \$38,400.00, and for office expense, \$28,925.15, including in both cases the obligations outstanding at the end of the previous year.

Prepare a trial balance of the branch before closing as at April 30, 1943, as you believe it should have appeared; include in the trial balance the unaccounted-for balance, if any, and prepare a statement showing how it was computed.

#### PROBLEM 145

#### LEDGER ANALYSIS

The following trial balance of the books of the Berkeley Sales Company (a proprietorship established July 1, 1945) at December 31, 1946, has been handed to one of its creditors, and on the basis of the figures submitted the creditor's accountant is about to prepare therefrom a balance sheet and operating statement. The trial-balance debits appear to exceed the credits by \$9.00, but in view of the fact that the total debits and credits for the year have been given, it has been suggested that you may be able to locate the error without recourse to the books. You have been asked, therefore, to prepare an analysis of the accounts, showing (a) the probable relation of the various debits and credits to each other and (b) one possible cause of the error and the reasons for your conclusion.

Following is the 1946 trial balance, together with a trial

balance after closing as at December 31, 1945, which was given to the creditor a year ago:

	Trai Dalances			
	December 31, 1945		December	31, 1946
	Debit	$\underline{\text{Credit}}$	Debit	Credit
Cash	\$ 80,471.13	\$ 76,307.60	\$ 4,271.75	
Customers' accounts	65,385.57	$62,\!379.75$	2,055.69	
Investments	23,800.00	2,500.00	8,500.00	
Merchandise	57,138.87	48,908.91	15,944.31	
Fixed assets	15,801.80	145.00	10,546.80	
Reserve for depreciation	•	1,837.07	•	\$ 527.34
Accounts payable	56,223.71	57,814.84		381.13
Proprietor's account	5,500.00	52,910.08		40,410.08
Sales	1,520.37	63,329.88		
Cost of sales	48,346.80			
Expenses	12,293.88			
Interest received		340.00		
Totals	\$366,482.13	\$366,473.13	\$41,318.55	\$41,318.55

#### PROBLEM 146

#### INSTITUTIONAL STATEMENTS

From the following account balances at June 30, 1945, obtained from the books of Zenith State University, prepare a statement of income and expense for the year ended on that date and a balance sheet at the close of the year, employing standard forms:

$\underline{ ext{Account}}$	Amount
Accounts payable, general	\$ 3,800
Accounts payable, student organizations	907
Accounts receivable, general, not credited to income until	
realized in eash	23,640
Advance from general fund to student-loan fund	5,000
Advance from student-loan fund to student-organization fund	1,266
Appropriation by legislature for current-year expenses, includ-	
ing \$49,026 carried forward from previous year.	1,989,026
Appropriation by legislature during current year for plant ad-	
ditions	200,000
Book value of buildings, grounds, equipment	11,102,408
Cash—	
Annuity fund	530
Buildings-and-grounds fund	31,430
Current operating fund, unrestricted	156,508
Endowment fund.	14,377
Restricted to special purposes	23,144
Student-loan fund.	7,114
Student-organization fund	7,151

Expenses—	
Experiment station	465,107
Instructional departments.	1.477.372
General administrative office	
Tibrare	159.608
Library Organized activities relating to instruction	104.223
D	122,834
Scholarships	4.000
State agricultural extension	10.739
Federal grants received	705,443
Gits, temporarily classified as endowment.	664,935
Gits, unrestricted	2,953
	37,590
Income: fees, sales, interest—	4.000
Annuity-fund interest	4.200
Bookstore	117,068
Educational departments	196,048
Endowment interest	23,758
Organized activities relating to instruction .	125.926
Other commercial activities	173.718
Residence halls	96.019
Student fees	394,679
Student hospital	<del>41</del> .896
Student organizations, net	5.538
Inventories: general storerooms and service	72,862
Investments—	
Annuity fund	119,470
Endowment fund	717,754
General fund	33.488
Student-loan fund	3.030
Student-organization fund.	30.625
Miscellaneous income	2.535
Notes receivable—	
Student-loan fund	42,290
Student-organization fund	23,165
	-5,215
Notes payable— Plant additions	180,000
Student-organization fund	14.595
Operation and maintenance—	221010
Bookstore	121,637
Other commercial activities	156.616
Physical plant	319.319
Residence halls	58.393
Student hospital	44.896
Prepaid general expenses	8.503
	2.000
Surplus, 7-1-11— Annuity fund	120,000
Buildings-and-grounds fund	10.753,838
Current unrestricted	49.026
Carrett, american	23.144
C 1002 1001 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	729,178
	152.359
Creative contraction of the cont	48,700
	38.635
Student-organization fund	65,050

The amount of \$49,026 carried forward from the previous year and included in the legislative appropriation for the current year was a part of last year's appropriation and was already on the books at June 30, 1944. On June 30, 1945, outstanding orders and contracts amounted to \$107,039.

# PROBLEM 147 Application of Funds

From the following comparative balance sheets, abstracted from published reports, and other information, (a) prepare a statement of application of funds for the year, without adjusting either balance sheet; and (b) attach brief comments on the propriety of the company's accounting methods as reflected in each of the numbered paragraphs below.

# BANNER INSTRUMENT COMPANY Abstract of Balance Sheets June 30, 1944 and 1945

- ,	$\underline{\text{June 30}}$		
Assets	1944	1945	
Cash		\$ 254,742.53	
War bonds	1,274,500.00	1,534,147.00	
Receivables	384,769.46	221,463.18	
Inventories	682,143.52	1,119,055.80	
Investment in subsidiary	172,025.62	311,334.52	
Treasury stock	82,400.00	0.005 515 00	
Fixed assets, at cost	3,286,340.05	3,335,715.26	
Goodwill	50,000.00		
Totals	\$6,067,302.33	\$6,776,458.29	
<u>Liabilities</u>			
V and T loans	\$ 200,000.00	\$ 425,000.00	
Accounts payable	18,139.88	82,081.70	
Accrued income tax	125,520.16	224,359.38	
Renegotiation liability	51,500.00	•	
4% scrial bonds	1,320,000.00		
Reserve for bad debts	2,484.09	3,145.56	
Reserve for depreciation	1,129,472.71	1,191,252.22	
Reserve for contingencies	1,400,000.00	2,181,160.97	
Capital stock, \$100 par value	500,000.00	775,000.00	
Capital surplus	234,693.83	152,293.83	
Earned surplus	1,085,491.66	1,742,164.63	
Totals	\$6,067,302.33	\$6,776,458.29	

- (1) Additional war bonds were purchased at a cost of \$240,000; to the original cost of bonds owned at the beginning of the year was added \$19,647.00, the amount by which the surrender value of the bonds increased during the year.
- (2) The investment in Banner Mig. Co., a fully owned subsidiary, was increased by (a) a cash advance of \$150,000 and (b) the subsidiary's net income for the year of \$49,308.90 which was credited to earned surplus; and decreased by a cash dividend of \$60,000.
- (3) Five hundred shares of treasury stock which had been purchased at an average cost of \$164.80 per share were retired in August, 1944, and the premium was charged against capital surplus. The latter account at June 30, 1944, consisted of contributions by stockholders arising from the original sale of capital stock in 1928 at \$120 per share, and profits of \$134,693.83 from the sale of capital assets.
- (4) Additions to fixed-asset accounts were \$337.252.74; retirements, charged to reserves for depreciation, were \$287,-877.53.
- (5) Goodwill, acquired in 1935 when the net assets of the Jackson Optical Company were purchased for cash, was charged to capital surplus.
- (6) The company's liability for income and excess-profits taxes for the year ended June 30, 1944, was settled for \$112,-346.50, and the charge to expense for the following year, decreased by the excess accrual, was \$211,185.72.
- (7) The liability finally established on the renegotiation of war-contract profits for the year ended June 30, 1944, was \$20,000; the balance of the accrual was credited to earned surplus, none being required at June 30, 1945.
- (8) The  $4^{\circ}_{C}$  serial bonds were repurchased on the market at 102 and canceled, the premium being charged to earned surplus.
- (9) Depreciation expense, added to depreciation reserves, was \$472,220.05. At the conclusion of certain war contracts, the machinery in Plant A on which maintenance had been neglected for several years was extensively overhauled and reconditioned; the cost of \$122,563.01 was charged against the depreciation reserve.
- (10) Machinery belonging to the Government was taken out of Plant B at the Government's expense. The company's

own equipment, removed in 1942, was restored, and in some instances replaced, at a cost to the company of \$46\$,839.03 which was charged against the reserve for contingencies. An addition to the reserve of \$1.250,000, charged to profit and loss, was authorized by the Board of Directors in order to absorb other similar costs and to absorb excessive overheads and other nonproductive expense pending the resumption of full peacetime production.

(11) A stock dividend of 50 per cent was declared and

paid in December, 1944.

(12) An option to purchase for each 1,000 shares of the company's capital stock at \$75 per share, given to officers in 1943 when the market price of the stock was 98, was exercised in February, 1945, when the market price was 122. Par was credited to capital-stock account, and the discount of \$25 per share was charged to earned surplus.

Net income was \$\$52,264.07.

#### PROBLEM 148

## CONSOLIDATING WORKSHEET

Following are trial balances of A Company and its subsidiary. B Company, at December 31, 1945. From them and the other information given, prepare a consolidating work sheet.

Provision for income taxes	00,000,000 00,000,001	420,000.00 20,000.00
Total debits	<u>\$10,264,800.00</u>	\$4.616.000.00
Credits	A Company	B Company
Accounts payable. Accrued income taxes. Other accrued expense. Advances from A. Reserve for bad debts. Reserve for depreciation. Reserve for goodwill. Reserve for postwar adjustments. First-mortgage 3% bonds. First-mortgage 4% bonds. Capital stock. Paid-in surplus. Earned surplus 12-31-44. Sales. Interest on— War bonds. Intercompany bonds. Advances to B.	\$ 79,200.00 624,800.00 10,000.00 2,500.00 1,420,600.00 1,000,000.00 800,000.00 424,700.00 4,797,300.00 20,400.00 7,200.00 11,700.00	\$ 69,500.00 431,400.00 4,000.00 220,000.00 3,200.00 54,000.00 445,000.00 200,000.00 200,000.00 2,644,500.00 5,000.00 900.00
Dividend received	16,200.00	
Total credits	\$10,264,800.00	\$4.616.000.00

A Company on January 1, 1937, purchased from security holders its 81 per cent interest in the capital stock of B Company and 90 per cent interest in B Company bonds, the total consideration being \$516,000 of which \$216,000 was allocated to the bonds. Because the purpose of the purchase was to obtain additional facilities for the manufacture of A Company's products, the goodwill appearing on the books of B Company (which had put out an entirely different product) was regarded as having no further value and its amortization over a 15-year period was immediately authorized. The earned surplus of B Company as shown by its books on December 31, 1936, was \$150,000. The 25-year first-mortgage 4 per cent bonds had been originally marketed on December 31, 1929, at 964.

For several years a part of the output of B Company has been an intermediate product sold to A Company at a uniform markup of 20 per cent (on sales). Sales of this character

recorded on B Company's books were \$258,000 for 1945, of which \$64,500 remained in A Company's inventory at the end of the year; the corresponding amount in A Company's inventory at the beginning of the year was \$82,000.

A Company has made advances to B Company on which the latter pays interest semiannually in cash at the rate of 6 per cent per annum. During 1945 (on July 1) an additional \$50,000 was advanced.

A Company constructed a building, at a cost of \$100,000, which, on January 1, 1940, was turned over to B Company for its use at a price of \$120,000. Depreciation of 3 per cent has been accrued thereon since that date.

#### PROBLEM 149

#### PARTNERSHIP ACCOUNTS

A, B, and C are members of a partnership which was recently dissolved, and you have been asked to prepare a summary operating statement for them: a statement which will show the basis on which a final distribution should be made.

The business commenced operations on January 15, 1944, by A and B, each contributing \$15,000 in cash and their full-time services. C entered the business on August 31, 1944; he contributed his services but no capital. Annual salary allowances were agreed on as follows: A, \$10,000; B, \$8,000; C, \$12,000. Interest of 10 per cent per annum, if earned, was to be allowed at the end of each calendar year on contributed capital. Profits and losses were to be shared thus:  $\frac{3}{4}$  to A and  $\frac{1}{4}$  to B; after the admission of C,  $\frac{3}{6}$  to A,  $\frac{1}{6}$  to B, and  $\frac{1}{6}$  to C.

No regular books of account were kept, but the following cash data has been obtained:

<u>Particulars</u>	1-15 to 8-31-44	Last 4 mo. 1944	1945	2 mo. 1946
Sales (all cash)	\$63,788.46	\$141,752.14	\$496,132.49	\$7,087.61
Purchases		83,192.25	398,962.88	8,321.42
Rent and other fixed charges		11,851.52	35,182.55	7,332.66
Other expenses	5,258.75	3,815.60	24,480.95	1,882.73
Withdrawals	3,000.00	2,400.00	7,200.00	1,200.00

Of the purchases, items totaling \$34,563.28 remained on

hand, and after the above schedule had been prepared were sold back to suppliers at a discount of 25 per cent. The cost of merchandise sold is to be spread in proportion to sales. Rent and other fixed charges are to be redistributed prorata over the 25½ months of the partnership life; other expenses, on the basis of sales. Withdrawals consist of \$200 per month for each partner.

#### PROBLEM 150

#### GROSS-PROFIT CHANGES

From the information following, prepare a brief analysis of gross-profit changes during the past two years (singly, and for the two years together), suitable for inclusion in the profit-and-loss section of a report to your client, Barker Manufacturing Company, for the calendar year ended December 31, 1945.

	Pr	oduct		
$\underline{\underline{Year}}$	$\underline{\underline{\mathbf{A}}}$	$\underline{\mathbf{B}}$	$ar{\mathbf{c}}$	~
	5	ales		- "
1943	\$325,000	\$60,000	\$450,000	
1944	250,000	66,000	500,000	
1945	200,000	63,000	560,000	
	Ma	terials		
19 <del>4</del> 3	130,000	18,000	90,000	
1677	87,500	19,800	150,000	
1642	60,000	18,900	224,000	
	Ī	abor		
1943	65,000	10,200	45,000	
1044	45,000	11,220	100,000	,
1945	30,000	10,710	168,000	

Factory-overhead costs during 1943 were \$98,564; 1944, \$124,976; and 1945, \$146,097. They may be spread on the basis of direct-labor costs.

Units of product sold were as follows: 1943: A, 6,500; B, 600; and C, 18,000. 1944: A, 5,000; B, 660; and C, 25,000. 1945: A, 5,000; B, 630; and C, 20,000.

#### PROBLEM 151

#### RECONSTRUCTION OF BOOKS

The retail store of John Pyx was destroyed by fire on March 20, 1946, and only a few items were salvaged. You

have been asked to prepare financial statements of the business as at that date, incorporating the losses and other adjustments described below, and distinguishing carefully between losses attributable to the fire and those pertaining to operations. From the general ledger, the one book of account saved, the following figures were abstracted as at February 28:

Fixtures	\$ 10,543.26	
Reserve for depreciation		\$ 8,672.77
Customers	53,483.82	
Petty cash	250.00	
Cash in bank	5,285.01	
Bank loan		10,000.00
John Pyx, capital		130,251.20
Merchandise	106,836.38	
Sales		59,977.39
Expenses	32,502.89	

Correspondence with creditors revealed unrecorded obligations to wholesale houses as at March 20 amounting to \$17,100.60, and an inspection of checks returned from the bank at the end of March, amounting to \$22,924.83, indicated payments to creditors from March 1-20 of \$15,267.82, the balance representing cash withdrawals by Mr. Pyx. Merchandise in transit at March 20 was recovered by suppliers and not billed. Bank deposits during that period, as shown by the bank statement, amounted to \$20,929.64 and, with the exception of a refund of \$200.25 on March 2 from a merchandise creditor, which Mr. Pyx recalls that he deposited shortly thereafter, these may be assumed to be payments on account by customers. Indebtedness acknowledged by customers totaled \$52,-876.45, but it is estimated that \$10,000 more due from them will never be acknowledged or recovered. Of the acknowledged indebtedness, \$1,000 will probably be uncollectible. Returns to suppliers, not yet accounted for by them, amounted to \$2,503.72, of which it is estimated that, in line with similar claims in the past, no more than half will ultimately be allowed.

The merchandise stock was insured for \$50,000. An agreement has been reached with the insurer whereby the claim, of the insured (a) will be based on the assumption that the arithmetic average of the two gross-profit ratios for the fiscal years ended October 30, 1944 and 1945, was in effect during the 4% months ended March 20, 1946, and (b) will be paid, up to the face value of the policy, in accordance with your

Capital stock, common, no par value— 100,000 shares authorized, 56,000 shares issued and in hands of public	\$ 224.000.00 38,000.00	262,000.00
Current liabilities (detail omitted)		388,000.00
Bad debts	\$ 2,000.00	
Postwar rehabilitation.	1,000.000.00	
Depreciation	384,000.00	
Fire & accident insurance	60,000.00	1,446,000.00
Surplus		2,671,000.00
Total liabilities.		\$4.867,000.00

On April 30, 1946, half of the shares of the treasury preferred stock which had been purchased in 1942 at \$15 per share, were sold at \$19 per share, the proceeds being credited to the treasury-stock account.

The preferred capital stock carries an annual dividend rate of \$1 per share, and the dividend is cumulative. As at April 30, 1945, unpaid dividends attaching to each share amounted to \$S of which \$5 was liquidated on January 1, 1946, by the acceptance by preferred stockholders of a dividend of 9,000 shares of no-par-value common stock on which a value of \$5 per share had been declared.

Capital surplus is the balance of a 50 per cent premium contributed in 1928 by stockholders on the original issue of preferred shares, less a deduction of \$12,000 occasioned by the sale in 1940 of land the original "cost" of which had been part of the consideration paid in by the preferred stockholders.

Balances in the reserves for bad debts and depreciation at April 30, 1946, were \$2,200.00 and \$401,000.00, respectively.

The reserve for postwar rehabilitation was created in the preceding year by a provision out of income for a like amount. The intent was to set aside profits for possible but unknown future contingencies. During the current year, the sum of \$500.000. also charged to income, was added to the reserve, and plant-extension costs, amounting to \$285,000.00, and relating to the manufacture of a postwar product unlike anything the company had previously put out, were charged against the reserve.

The fire-insurance reserve was increased during the year by a further provision of \$10,000 charged to profit and loss, and decreased by \$2,000.00—the cost-less-depreciation of a building destroyed by fire on April 15, 1946. Additional costs arising out of the fire, and not yet appearing on the books, for injuries to persons are expected to amount to \$1,500.00.

Surplus, as shown on last year's balance sheet, consisted of the value, ten years ago, of a donated plant site, amounting to \$134,000.00; gains of \$6,300.00 from the sale in 1941 of 2,000 shares of treasury preferred stock in excess of its acquisition cost of \$12 per share; and earned surplus, \$2,530,700. During the past year, charges for the dividend in no-parcommon stock and for an adjustment of \$4,100 in the previous year's tax liability reduced the account to \$2,621,900.00. Book net income for the year amounted to \$222,500.00.

# PROBLEM 153 RECAPITALIZATION DISTRIBUTION

The stockholders of Hamper Manufacturing Company on March 15, 1946, approved a plan of recapitalization whereby \$10-par shares of a newly authorized issue of common stock were issued in exchange for the preferred and common stock then outstanding. The plan involved calling in immediately all old shares and the issuance at par, not later than April 1, 1946, of the new shares, based, according to the stockholders' minutes, on "the book value, as the term is commonly employed by accountants, of the old shares at January 31, 1946." Your client, Fred Jones, who owned 176 shares of preferred and 120 shares of common, received in the exchange 1940 shares of the new stock; in a letter from the company he was informed that 1760 shares related to his preferred and 180 to his common holdings. He has requested that you review the basis of the distribution, and, if you find it in error, that you determine what the distribution to him should have been.

Relevant financial transactions of Hamper Manufacturing Company have been as follows:

Item	Date	Transaction
1	1925	6,000 shares of no-par-value common stock were mar- keted at \$20 per share of which \$15 was regarded as stated value and \$5 as paid-in surplus.
2	1926	1,000 shares of no-par-value preferred stock, bearing a cumulative-dividend rate of \$5 per share per annum, were marketed at \$100 per share of which \$75 was regarded as stated value and \$25 as paid-in surplus.

3	1928	4,000 shares of no-par-value common stock were marketed at \$24.50 a share (which reflected the accumulation of earned surplus) of which \$15 was regarded as stated value and \$9.50 as paid-in surplus.
4	1930	A loss of \$26,572.45 from an unsuccessful business venture carried on during 1929–1930 was charged to paidin surplus, leaving a balance of \$66,427.55 in the latter account.
5	1939	Operating losses, which had absorbed the balance of earned surplus as at January 31, 1939, continued through January 31, 1945, and dividends, though formally accrued on the books, have not been paid since January 31, 1939, except as noted in item 8 below. The accumulated deficit on the books at January 31, 1945, was \$85,675.78.
6	1-31-39 to	Balance in the preferred-stock accrued-dividends account, accrued at \$5,000 per year, less payment noted
	1-31-46	in item 8 below: \$32,000.
7	1944	A purchase, from a retired vice-president, of S00 shares of common stock at \$21,340, represented the price at which the stock had been originally sold (\$24.50 per share) plus 15 per cent of his gain on the transaction (he had purchased the shares in 1940 from another stockholder) in order to compensate him for estimated income tax on the gain.
8	2-1-45	A repurchase, from a stockholder, of 100 shares of preferred stock at \$14,000, representing the redemption price of \$110 per share at which, by original agreement with preferred stockholders, preferred shares must be purchased or redeemed by the company, plus accrued dividends of \$3,000.
9	2-1-45 to 1-31-46	Net profit for year, per books, after deducting preferred- stock-dividend accrual for year: \$35,488.23.

#### PROBLEM 154

#### TRIAL-BALANCE ANALYSIS

During the course of an annual audit of a corporation which distributes electrical products, you have been given the assignment of examining the accounts of a branch office in Keokuk. You are handed a trial balance, prepared by the branch bookkeeper and reproduced below, and you observe that the books do not appear to be in balance. Your principal, preparing an audit program, asks you to analyze the trial balance in an effort to ascertain, from the information at hand, whether the possible source or sources of error may be discovered. Make such an analysis.

# ELPROCO, INC.—KEOKUK BRANCH Trial Balances

	Balances 4-30-45		Ledger totals fiscal year ended 4-30-46	
Account	Dr.	<u>Cr.</u>	$\underline{\text{Dr.}}$	<u>Cr.</u>
Cash. Receivables. Inventory. Fixtures. Depreciation reserve. Accounts payable Interoffice account. Sales. Cost of sales. Sales commissions. Advertising. Other sales expense. Executive salaries. Employees' bonuses. Administrative expense. Home-office supervision. Obsolete stock. Posting error.	66,587 124,912 3,018	\$ 1,995 6,377 220,346	\$ 386,626 414,158 420,580 3,152 130 106,734 250,000 422 231,140 26,493 10,500 6,825 15,000 4,500 5,098 20,000 2,458 180	\$ 355,848 352,462 234,798 150 2,305 116,641 493,856 347,571
Totals	\$228.718	\$228,718	\$1,903,996 ===================================	\$1,903,996

#### PROBLEM 155

# ADEQUACY OF DEPRECIATION RESERVE

You have been asked by a client to suggest a method for testing the adequacy of depreciation reserves. Illustrate such a method, using as a basis the data that follows, and compute what you believe the reserve requirement should be at December 31, 1945.

A careful survey and analysis of factory machinery by company engineers was made during 1945. A controlling asset account, maintained at cost and appearing in the general ledger, is in agreement with the analysis, but the general-ledger account, "Reserve for Depreciation, Factory Machinery," is the balance remaining from three classes of entries which have been made consistently since the reserve was established at the inception of the company in 1923: credits from annual provisions for depreciation of 5 per cent of the control-account balance at the beginning of the year (without allowance for scrap value), and from sales of salvage

realized from machinery disposed of; debits for the full cost of machinery retired.

There were 1,000 machines on hand and in active use on January 1, 1945, and for the purposes of this problem you may assume that the age, utility, and remaining life of the machines shown in the analysis are statistically representative of the entire 1,000, and that the figures for cost, depreciation, present reserve, and reserve requirements for the ten samples are each precisely 1 per cent of the same data for the 1,000. The machines have all been similar in design and performance, the gross investment has remained quite constant since 1925, and there has been but little change in their expected future utility.

The only entries in the machinery and reserve accounts during 1945 have been to record a purchase of \$6,000; and salvage, on an old machine retired, amounting to \$100.

PRECISION PRODUCTS COMPANY

Analysis of factory machinery on hand as at January 1, 1945, plus purchases during the year: an extract from a report of company engineers

Year	Remain-	
Ac-	ing Use-	
quired	ful Life	Cost
1923	1	\$ 8,000
1923	<b>2</b>	4,000
1925	6	12,000
1926	2	6,000
1928	4	8,000
1931	7	2,000
1938	11	22,000
1941	9	18,000
1942	20	8,000
1942	15 ,	6,000
1945	25	6,000
	Acquired 1923 1925 1926 1928 1931 1938 1941 1942 1942	Ac-quired ing Use-quired ful Life  1923 1 1923 2 1925 6 1926 2 1928 4 1931 7 1938 11 1941 9 1942 20 1942 15

<sup>\*</sup> Retired in September, 1945.

Balance of actual reserve on books at January 1, 1945......\$48,000

For the past twenty years salvage has averaged 2 per cent of cost.

#### PROBLEM 156

### LABOR-BONUS PERCENTAGE

Determine the bonus percentage called for in a labor-management contract under the conditions outlined below.

M Company had been engaged in the manufacture of war products until October 1, 1945, the beginning of its present fiscal year; at that time it returned to the production of two models of a patented can opener the demand for which had been steadily increasing. The OPA had allowed a price increase of 10 per cent on each of the two models; but, facing ultimate competition, the management has thus far kept the prices at prewar levels. Wartime experiments have brought about certain substitutions of materials, improvements in the operation and durability of the product, and alterations in the fabricating process. The effect of these changes on costs is still uncertain.

To stabilize labor costs, an agreement with the local factory-workers' union was entered into on September 30, 1945; following are excerpts:

"Clause 5a: It is mutually recognized that any increase in the prices of the company's products is undesirable at this time unless formula earnings, defined in clause 5d, fall below the minimum earnings specified in clause 5c, in which event prices will be so adjusted as to compensate for the deficiency.

"Clause 5b: It is mutually recognized that normal profits are the joint product of labor and management; and that if the units of either model sold during the year exceed the minimum sales quota specified in clause 5d, labor's portion of the consequent additional earnings over and above the minimum specified in clause 5c will be determined as follows: to such additional earnings will be added the formula overtime differential described in clause 5d; and one-half of the resultant total, less the formula overtime differential, will be set aside in the books of account as an employees' bonus and will be paid in cash within 30 days following the close of the fiscal year, on the basis of the total wages, including overtime, for such year, of each employee.

"Clause 5c: The minimum earnings referred to in the two preceding clauses will be \$240,000 for the year ending September 30, 1946, this figure being the net profit (i) desired by the management for income taxes, dividends to stockholders, and additions to surplus, and (ii) resulting from the application to a minimum sales estimate of the cost allowances provided in clause 5d.

"Clause 5d: For the fiscal year ending September 30, 1946, the earnings formula will be as follows:

Minimum sales-quota units and prices: Model A, 1,250,000 units at \$2 per unit; Model B, 1,000,000 units at 60 cents per unit.

Cost allowances-

Material: Model A, 50 cents per unit; Model B, 11.7 cents per unit; 10 per cent to cover extra costs of storing and handling will be added to material required for the production of units in excess of either of the above sales quotas.

Labor, on the basis of a 40-hour week and production to equal the above minimum sales quotas: Model A, 62.4 cents per unit; Model B, 19.5 cents per unit; in the event of sales exceeding these quotas and a corresponding increase in production (which will be accomplished by the overtime employment of the present labor force), it may be assumed (1) that the quantity of output per labor hour will remain constant, and (2) that the increment in unit cost because of overtime (referred to in clause 5b as "overtime differential") may be obtained by applying the factor .04 to the above unit labor cost for the production of an added quantity, of either model, of 10 per cent or less, and the factor .08 for the production of an added quantity greater than 10 per cent but less than 20 per cent; above 20 per cent, the factor for added production will be determined by negotiation.

Overhead: 66% per cent of labor cost, including overtime.

Selling: 8 per cent of selling price.

Advertising: 6 cents per unit sold.

Administrative: 4 per cent of all above costs.

Minimum carnings, representing the excess of minimumquota sales over cost allowances: \$212,000 for Model A, and \$28,000 for Model B.

Except for the additional cost allowances above provided, the cost ratios or unit costs will not be influenced or modified during the year by actual costs; but the formula estimate of units to be sold will be changed to accord with actual units sold per books, and the formula cost allowances will be applied against such altered sales in order to determine whether the

minimum earnings shown above, and specified in clause 5c, are less than or in excess of the formula earnings so revised.

"Clause 5e: At the beginning of the second half of the fiscal year, the company's regular independent accountants will be requested to prepare a preliminary estimate of the bonus, stated as a percentage of total labor cost, including overtime, and based upon latest available estimates of total units to be sold for the fiscal year. . . ."

You are given a sales-department estimate as at March 31, 1946, showing quantities to be sold during the full fiscal year ending September 30, 1946; these exceed formula salesquota unit estimates by 15 per cent for Model A, and 5 per cent for Model B.

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